

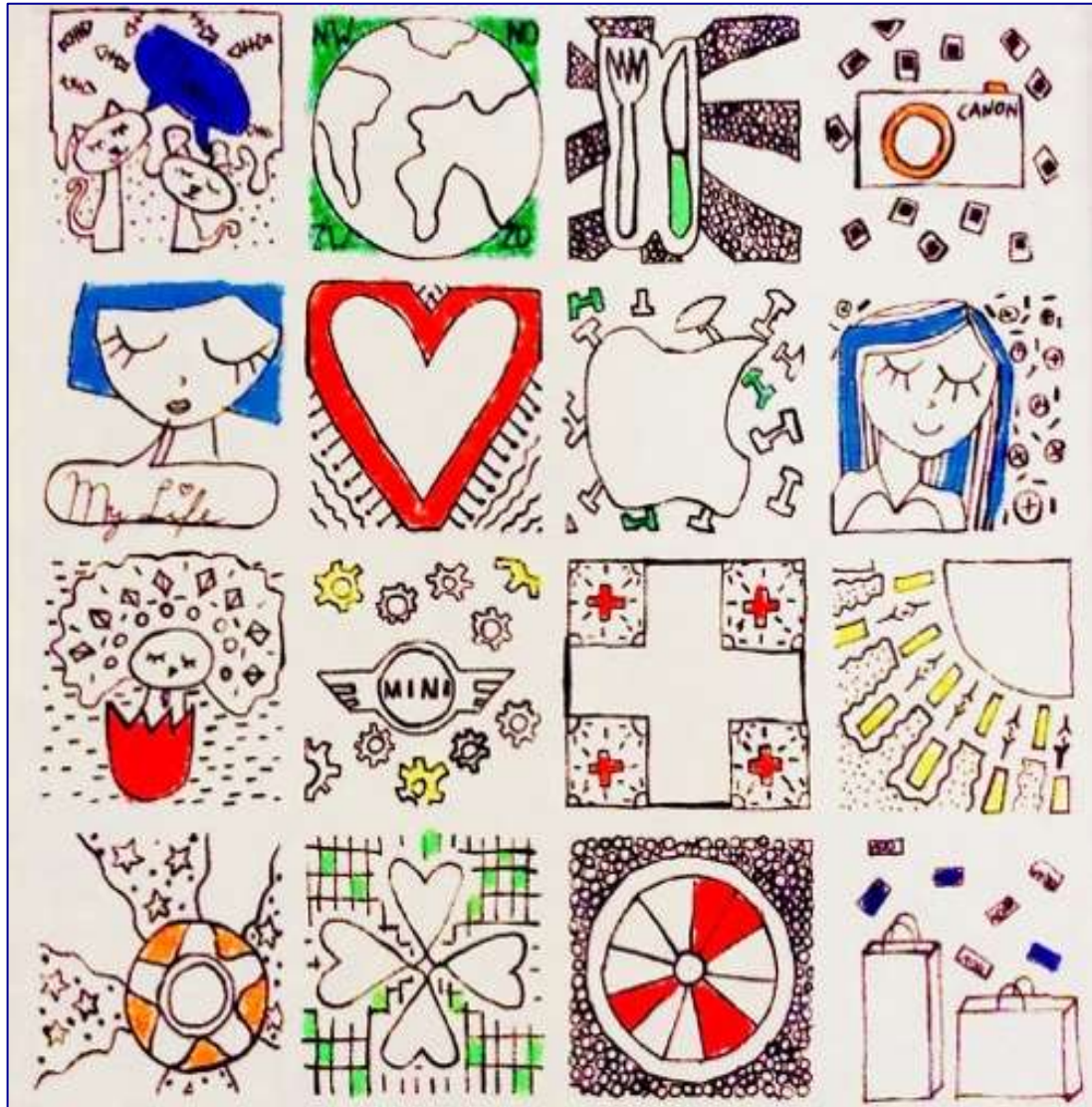
# SEQUELLEN NA INTENSIEVE ZORG

## LONG-TERM OUTCOME

Sandra Oeyen, MD, PhD

Intensieve Zorg

Universitair Ziekenhuis Gent



the number of ICU-survivors  
increases...but...

# Quality of life after intensive care: A systematic review of the literature

Sandra G. Oeyen, MD; Dominique M. Vandijck, PhD; Dominique D. Benoit, MD, PhD; Lieven Annemans, PhD; Johan M. Decruyenaere, MD, PhD

1. Critically ill patients had **a lower QOL** at least 1 year after ICU discharge compared to an age- and gender matched population.
2. **Physical domains** deteriorated but improved slowly over the years while mental domains were stagnant or declined further.
3. Survivors of **severe ARDS, prolonged mechanical ventilation, severe sepsis, severe trauma** appeared to have the worst reductions in QOL at long-term.
4. There were **important methodological** (response rate; follow-up periods) **and qualitative differences** (baseline QOL) between the included studies.

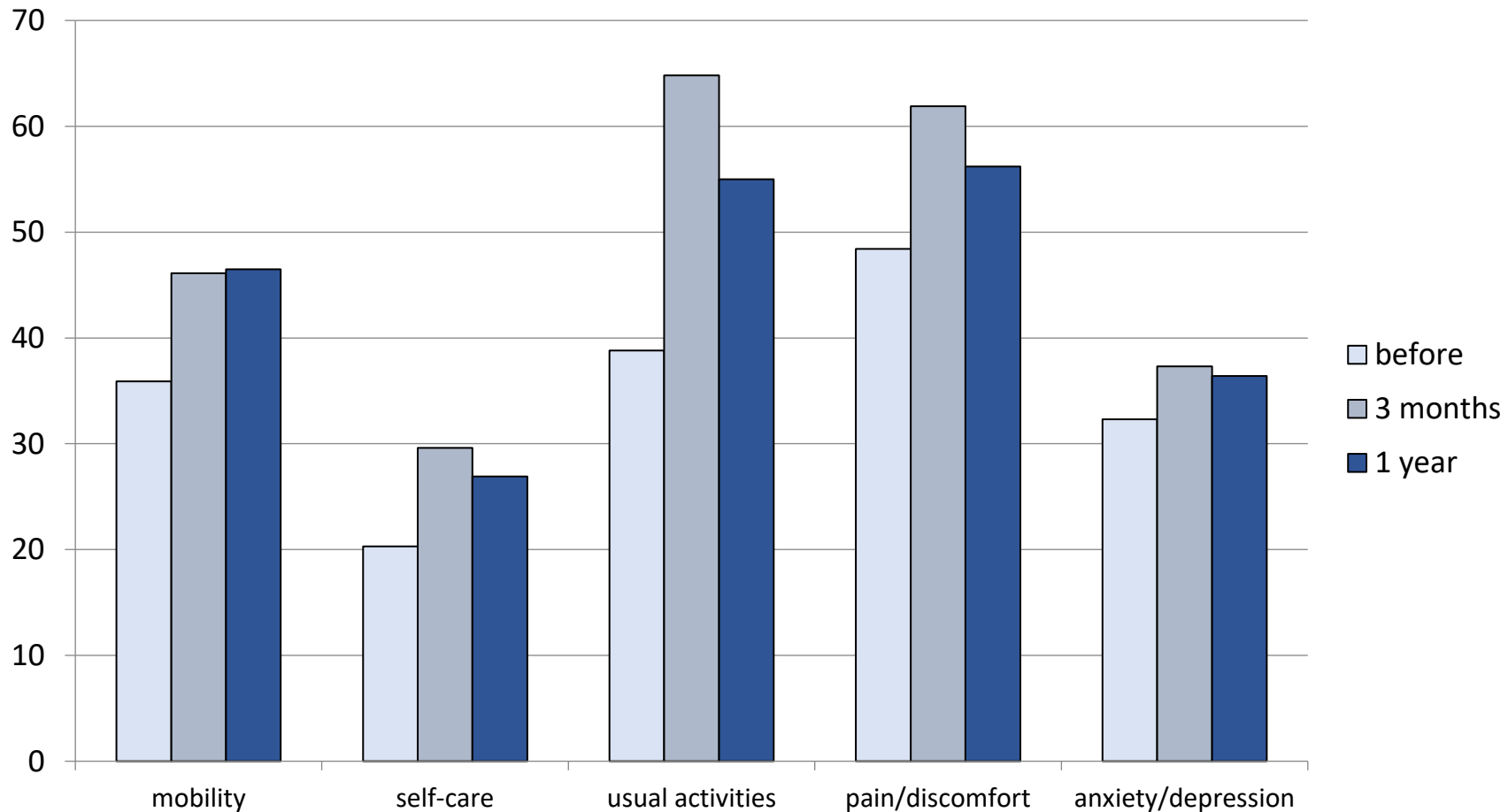
WAT KUNNEN WE DOEN?

1/ Kennis

what we know matters

# EQ-5D/ Percentage of survivors with **problems** before ICU, and 3 months and 1 year after ICU discharge

Cost and Outcomes in the ICU(COSI)study, Ghent University Hospital

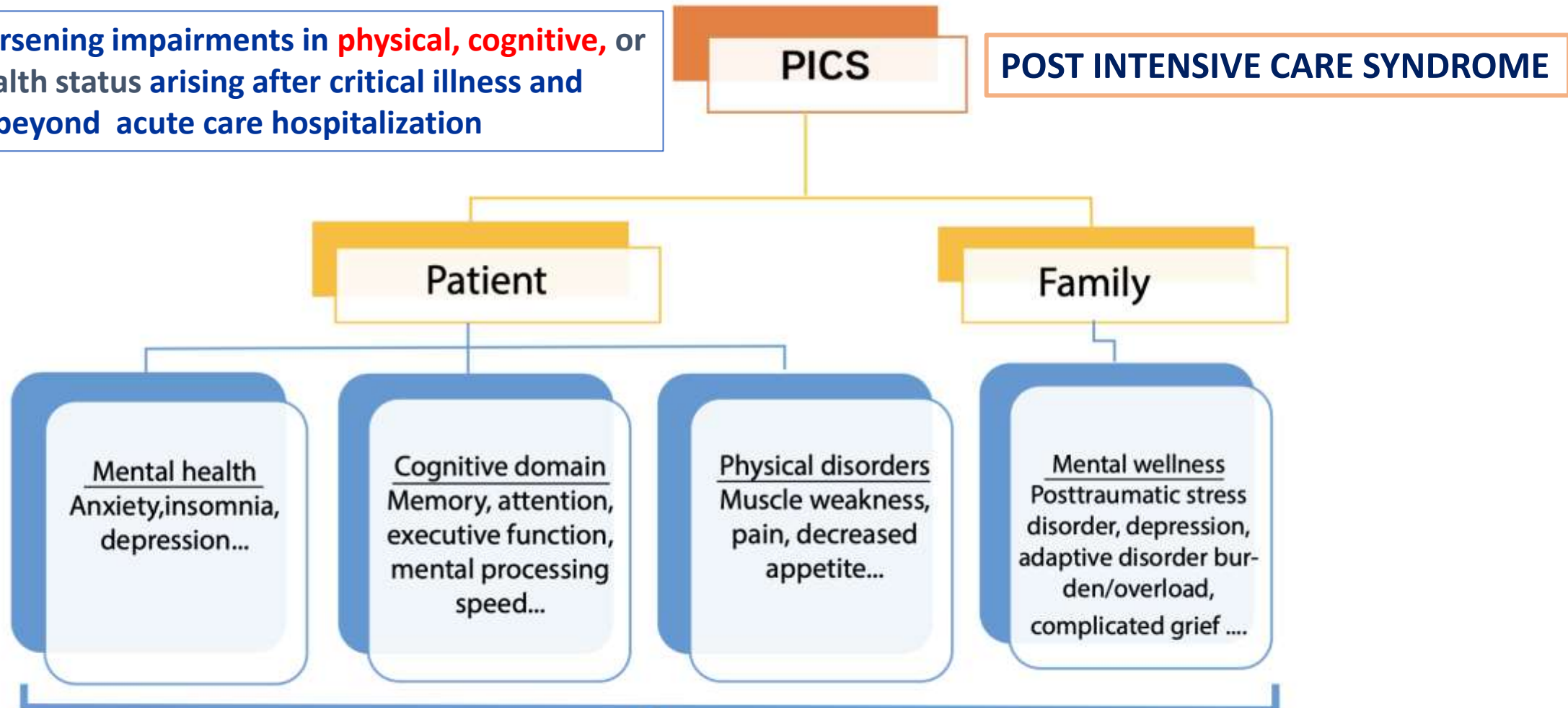


all P < 0.001; anxiety/depression P < 0.01

# LONG-TERM OUTCOME

Needham, Crit Care Med 2012

new or worsening impairments in **physical, cognitive,** or **mental** health status arising after critical illness and persisting beyond acute care hospitalization



**ORIGINAL ARTICLE**

# One-Year Outcomes in Caregivers of Critically Ill Patients

## **CONCLUSIONS**

In this study, most caregivers of critically ill patients reported high levels of depressive symptoms, which commonly persisted up to 1 year and did not decrease in some caregivers. (Funded by the Canadian Institutes of Health Research and others; ClinicalTrials.gov number, NCT00896220.)

# FYSIEKE OUTCOME



verlies aan spiermassa en spierkracht  
algemene zwakte  
vermoeidheid  
dysfagie

pijnlijke gewrichten  
verminderde eetlust - gewichtsverlies

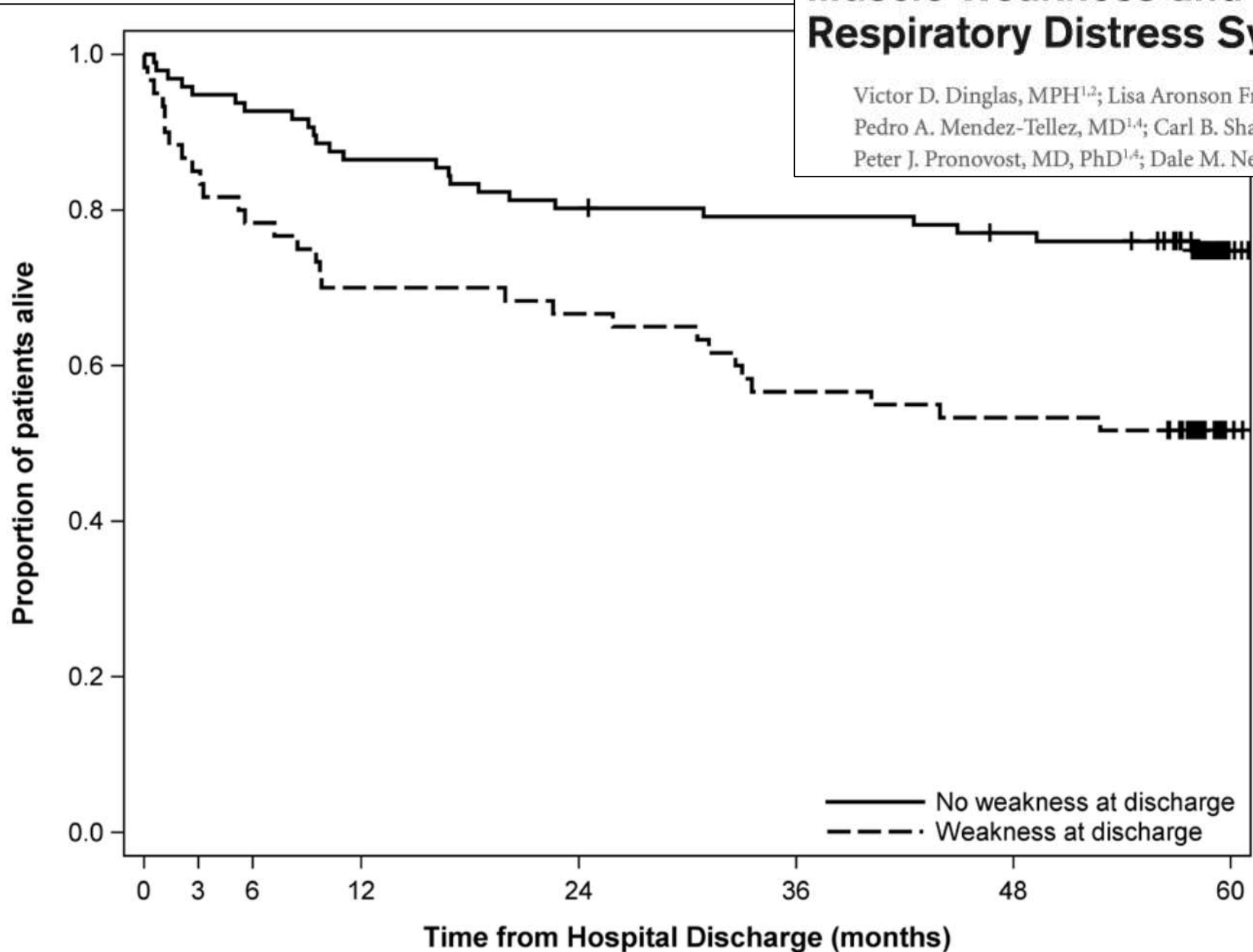
stem- en smaakveranderingen  
huid- en nagelveranderingen  
haarverlies  
sexuele dysfunctie  
pijn  
jeuk



# Muscle Weakness and 5-Year Survival in Acute Respiratory Distress Syndrome Survivors

Victor D. Dinglas, MPH<sup>1,2</sup>; Lisa Aronson Friedman, ScM<sup>1,2</sup>; Elizabeth Colantuoni, PhD<sup>1,3</sup>;  
Pedro A. Mendez-Tellez, MD<sup>1,4</sup>; Carl B. Shanholtz, MD<sup>5</sup>; Nancy D. Ciesla, DPT, MS<sup>1,2</sup>;  
Peter J. Pronovost, MD, PhD<sup>1,4</sup>; Dale M. Needham, FCPA, MD, PhD<sup>1,2,6</sup>

Crit Care Med 2017





# Five-year impact of ICU-acquired neuromuscular complications: a prospective, observational study

Nathalie Van Aerde<sup>1</sup>, Philippe Meersseman<sup>2</sup>, Yves Debaveye<sup>1,3</sup>, Alexander Wilmer<sup>2</sup>, Jan Gunst<sup>1,3</sup>, Michael P. Casaer<sup>1,3</sup>, Frans Bruyninckx<sup>4</sup>, Pieter J. Wouters<sup>1,3</sup>, Rik Gosselink<sup>5</sup>, Greet Van den Berghe<sup>1,3</sup> and Greet Hermans<sup>1,2\*</sup>

MRC > 55 normal  
MRC < 48 ICU-AW  
MRC < 36 severe weakness

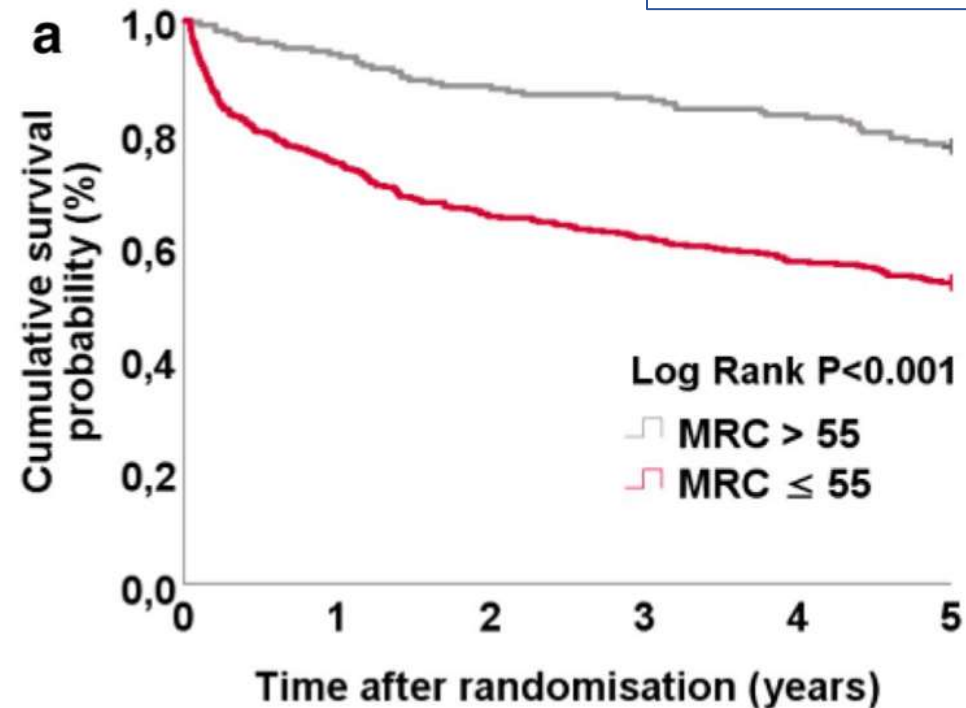
## Medical Research Council Sum Score (0-60; both sides)

### Muscle group evaluation

- Wrist extension
- Elbow flexion
- Shoulder abduction
- Dorsiflexion foot
- Knee extension
- Hip flexion

### Appointed score

- 0 no visible/palpable contraction
- 1 visible/palpable contraction without movement of the limb
- 2 movement of the limb, but not against gravity
- 3 movement against gravity
- 4 movement against gravity and some resistance
- 5 normal



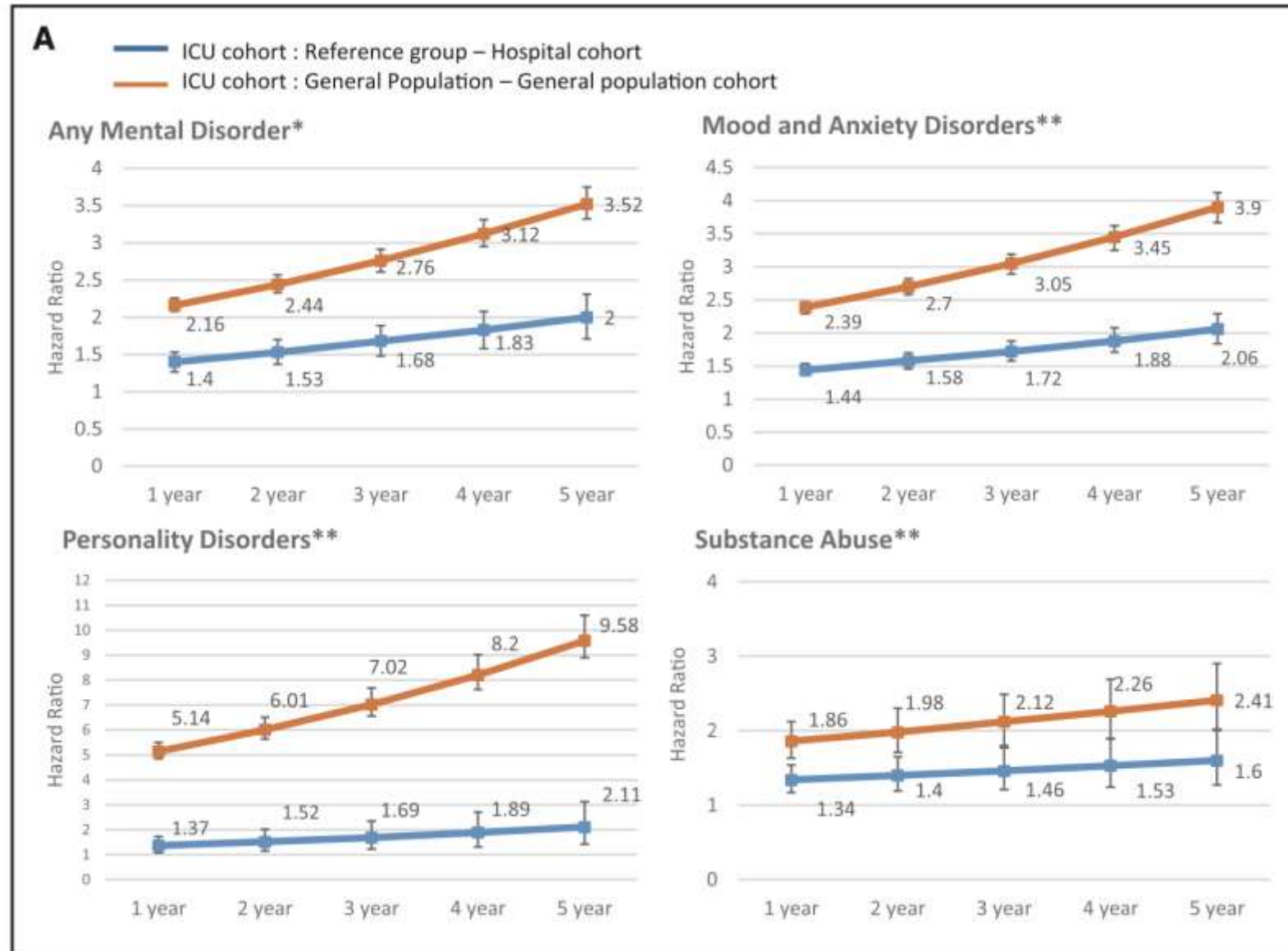
**Conclusions:** ICU-acquired neuromuscular complications may impact 5-year morbidity and mortality. MRC sum score, even if slightly reduced, may affect long-term mortality, strength, functional capacity and physical function, whereas abnormal CMAP only related to long-term mortality.



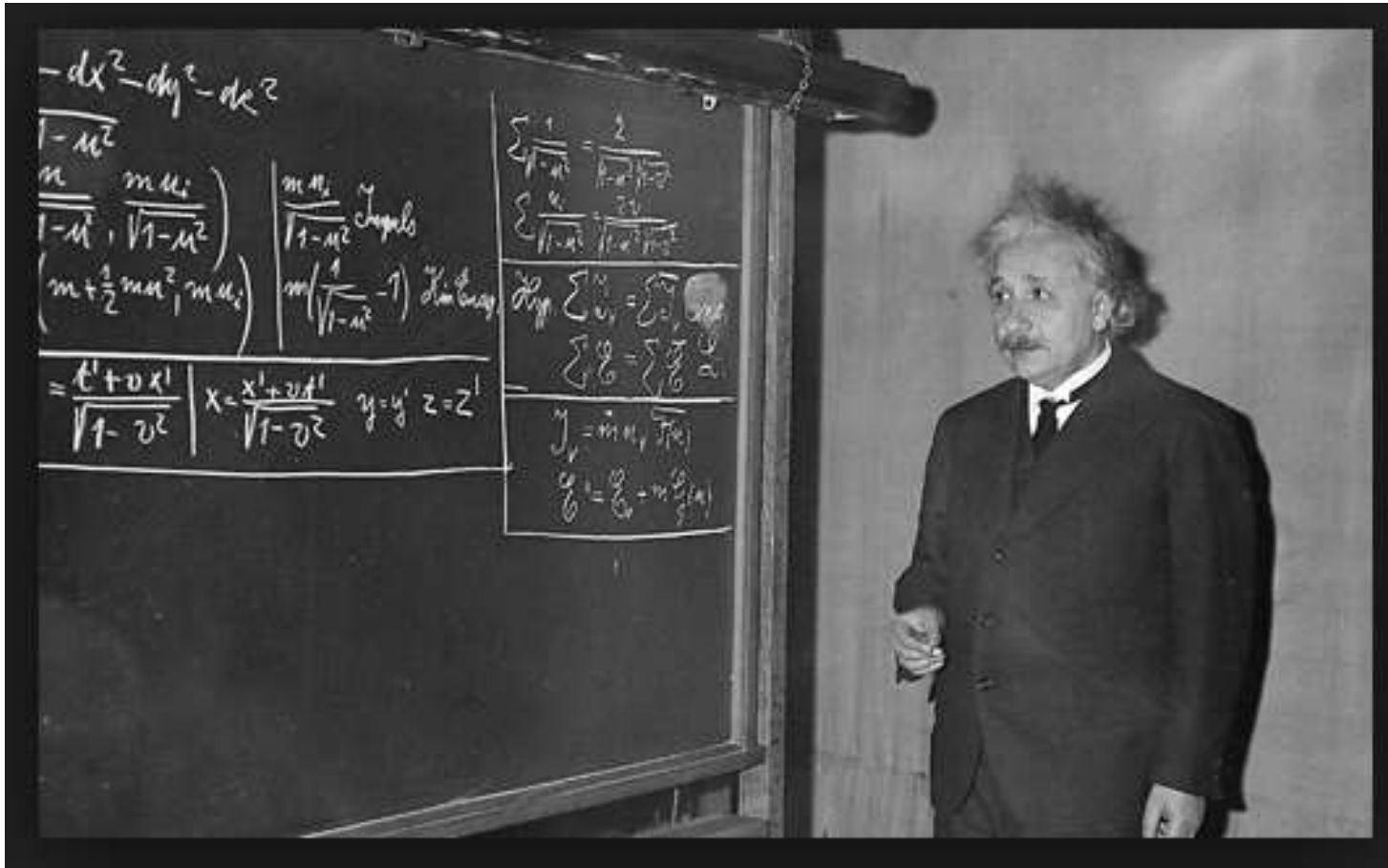
# Depressive Symptoms After Critical Illness: A Systematic Review and Meta-Analysis

Depressive symptoms occurred in approximately 30% of general critical illness survivors with persistent severity over 12-month longitudinal follow-up. ICU survivors with comorbid psychopathology before and during their hospitalization have a higher prevalence of depressive symptoms after discharge. However, age, sex, severity of illness, and length of stay were consistently not associated with depressive symptoms; hence, a large pool of ICU survivors are at-risk for depressive symptoms. No post-ICU intervention for preventing or treating depressive symptoms was supported by strong evidence although physical rehabilitation after discharge merits further investigation.

# The 5-Year Incidence of Mental Disorders in a Population-Based ICU Survivor Cohort



# COGNITIEVE OUTCOME



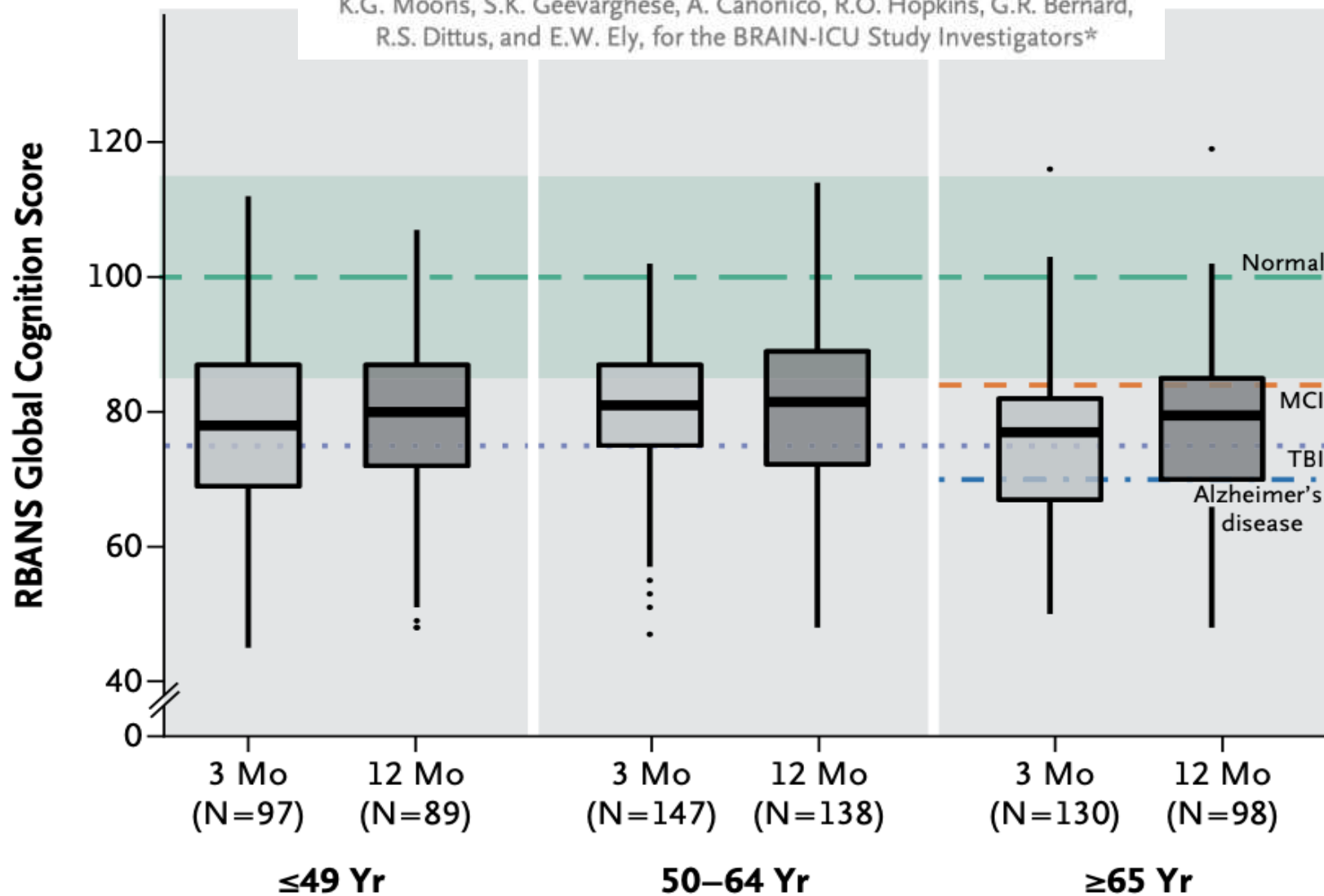
- geheugen
  - concentratie - aandacht
  - dagdagelijkse taken
  - beslissingen nemen
  - multi-tasking
  
  - no return to work
  
  - 90% bij ziekenhuisontslag
  - klinisch zeker onderschat
- we do not routinely recognize cognitive dysfunction*

**sterke associatie met leeftijd, opleiding, ICU delirium, ARDS, severe sepsis**

# Long-Term Cognitive Impairment after Critical Illness

P.P. Pandharipande, T.D. Girard, J.C. Jackson, A. Morandi, J.L. Thompson, B.T. Pun, N.E. Brummel, C.G. Hughes, E.E. Vasilevskis, A.K. Shintani, K.G. Moons, S.K. Geevarghese, A. Canonico, R.O. Hopkins, G.R. Bernard, R.S. Dittus, and E.W. Ely, for the BRAIN-ICU Study Investigators\*

NEJM 2013; 369: 1306-1316



Zijn de sequellen na een langdurig IZ-verblijf voor een niet-COVID-19 reden  
**anders**  
dan de sequellen na een langdurig IZ-verblijf door COVID-19?



# Clinical characteristics and day-90 outcomes of 4244 critically ill adults with COVID-19: a prospective cohort study



Intensive Care Med 2021

COVID-ICU Group on behalf of the REVA Network and the COVID-ICU Investigators\*

- **Overall 90-day mortality was 31%** and decreased over time during the study period (February 25th – May 4th 2020)
- **90-day mortality increased with the severity of the ARDS from 30% in mild to 50% in severe ARDS**
- Very long durations of mechanical ventilation and ICU stay, which have contributed to the swamping of our ICU's capacity, is critical for the management of the second wave of the epidemic
- **Long-term follow-up is warranted to provide a complete description of the outcomes and potential sequelae associated with the most severe forms of COVID-19 requiring ICU treatment**

## COVID-19 IN INTENSIVE CARE

# COVID-19 research in critical care: the good, the bad, and the ugly

Jorge I. F. Salluh<sup>1,2\*</sup> , Yaseen M. Arabi<sup>3,4</sup> and Alexandra Binnie<sup>5,6,7</sup>



# Different strategies lead to different outcomes

- Triage of patients
- Selection of patients
- Admission criteria
- Hospital organization

"Van het coronavirus is het zeker bewezen dat het langdurig klachten kan veroorzaken. Ook bij jonge en gezonde mensen. Veel studies spreken van minstens 10 procent van de besmettingen die aanleiding geven tot langdurige klachten. We weten dat het virus mensen in het ziekenhuis kan doen belanden. Dat is 7 procent van de gekende besmettingen. En we weten dat het mensen kan doden, dat is zo in 1 procent van de besmettingen. Dat percentage ligt nog een heel pak hoger bij de alleroudsten en gelukkig een stuk lager bij de jongsten."

Steven Van Gucht, 9 maart 2021

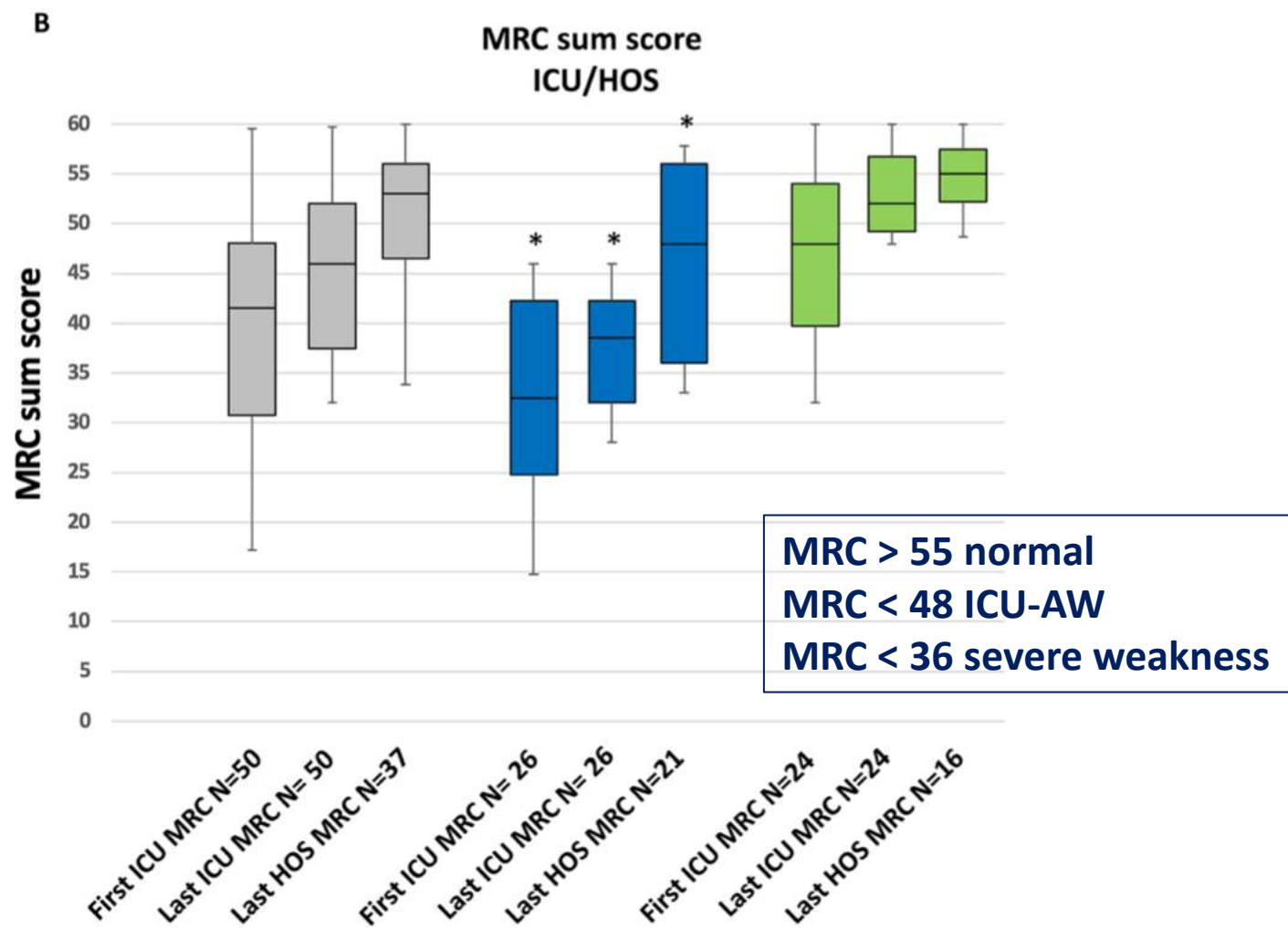
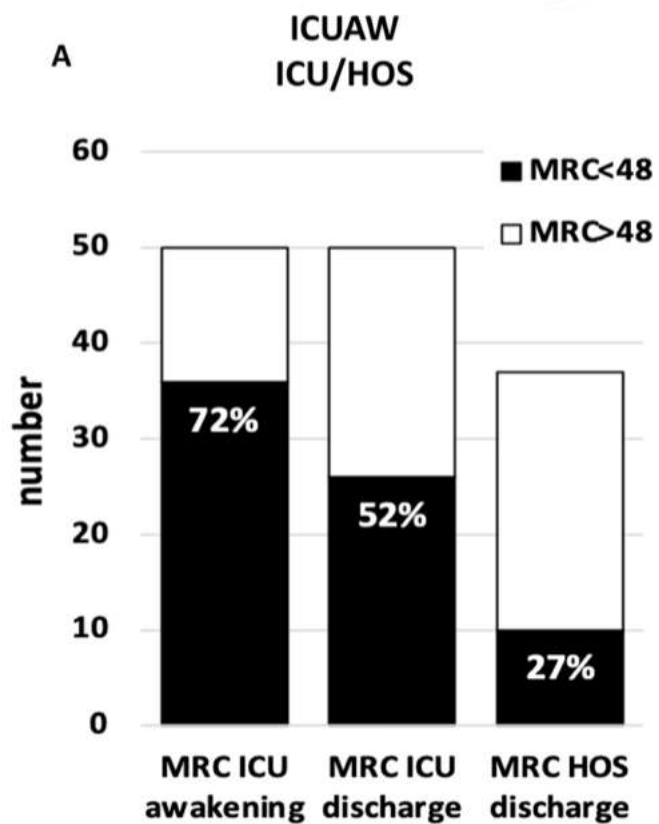
Als de klachten na enkele weken of maanden niet verdwijnen, dan spreekt men ook wel over **“Long-Covid”, “langdurige COVID”** of **“post-COVID syndroom”**.

**We weten nog niet hoe vaak langdurige COVID voorkomt.** Volgens de Grote Coronastudie van de UAntwerpen heeft 30,2% van de patiënten twee maanden na het begin van de infectie nog altijd klachten. Het gaat vooral om vermoeidheid, spierpijn, concentratiestoornissen en kortademigheid.

## Common problems at long-term after COVID-19 pneumonia with need for ICU admission

<b>Physical</b>	<b>Mental</b>	<b>Cognitive</b>
Asthenia Anosmia Ageusia Headache Dyspnoea for mild-moderate-severe efforts Functional impairment Loss of body weight Muscle wasting Swallow difficulties Need for oxygen therapy at home	Anxiety Depression Guilt Nightmares PTSD	Difficulties to concentrate Memory loss Problems with multi-tasking  Return to work

# Intensive care unit acquired muscle weakness in COVID-19 patients



## Figure legend

■ Total population with MRC

■ ICUAW at ICU discharge


■ No ICUAW at ICU discharge

\* P < 0.05 as compared to no ICUAW at ICU discharge



# High prevalence of acute stress disorder and persisting symptoms in ICU survivors after COVID-19

Intensive Care Med 2021

Silvia Mongodi<sup>1\*</sup> , Giulia Salve<sup>2</sup>, Guido Tavazzi<sup>1,2</sup>, Pierluigi Politi<sup>3</sup>, Francesco Mojoli<sup>1,2</sup> on behalf of the COVID-19 Post-ICU team and COVID-19 Pavia Crisis Unit

**The COVID-19 pandemic presents all the features to deeply impact not only on physical but also on mental health**

- Unclear memories of the ICU stay – feeling of complete isolation
- Nightmares
- Feeling of derealization
- Initial belief of being in a fake hospital (>> beginning of the pandemic)



# Postintensive Care Syndrome in Survivors of Critical Illness Related to Coronavirus Disease 2019: Cohort Study From a New York City Critical Care Recovery Clinic

- **Inclusion**

- COVID-ICU survivors (minimum 7 days invasive mechanical ventilation)
- Referred to a critical care recovery clinic 1 month after hospital discharge

- **ICU characteristics**

- 8 days (6-14 days) mechanical ventilation
- 46.7% NMBA in those on mechanical ventilation
- Sedation with propofol, benzodiazepines, opioids
- 42.2% delirium
- 10 days (7-15 days) ICU-LOS
- 18 days (13-27 days) hospital-LOS

- **Findings: 91% COVID-ICU survivors reported at least one PICS symptom**

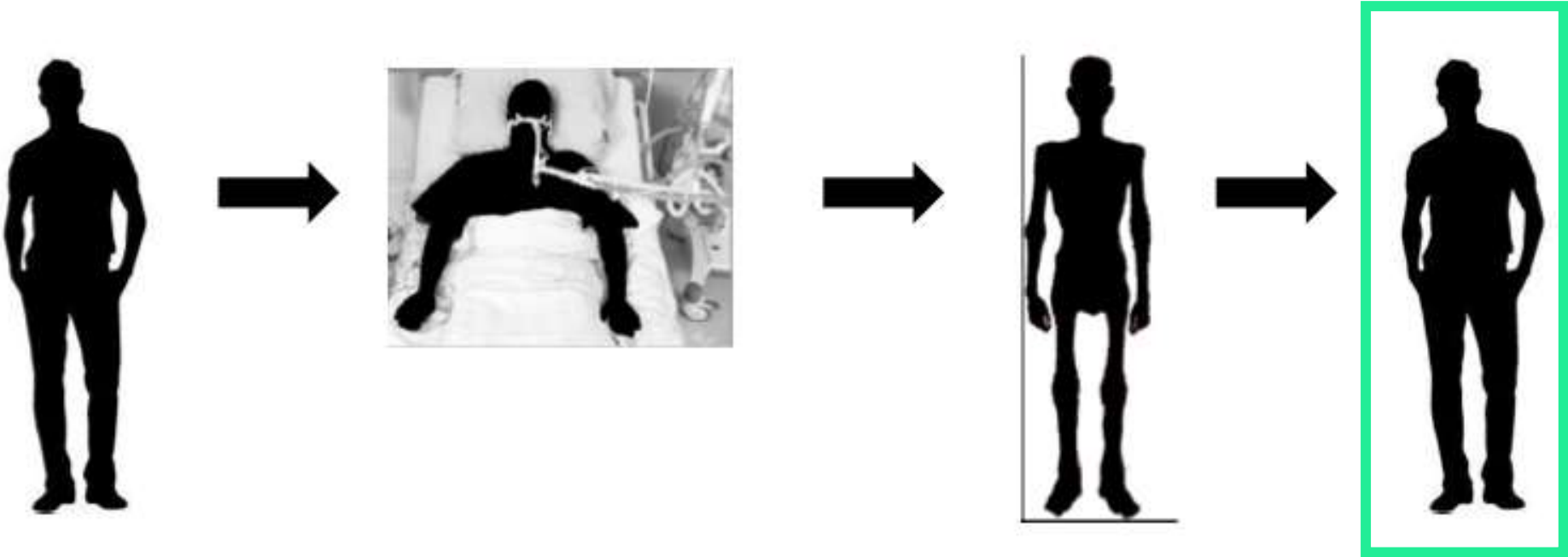
- 87% physical impairment
- 49% mental problems (depression, anxiety, PTSD, insomnia)
- 20% cognitive problems

**This suggest the need for rehabilitation interventions (physical therapy, occupational therapy, neuropsychologic assesment) and long-term monitoring for symptoms related to PICS.**

**WAT KUNNEN WE DOEN?**

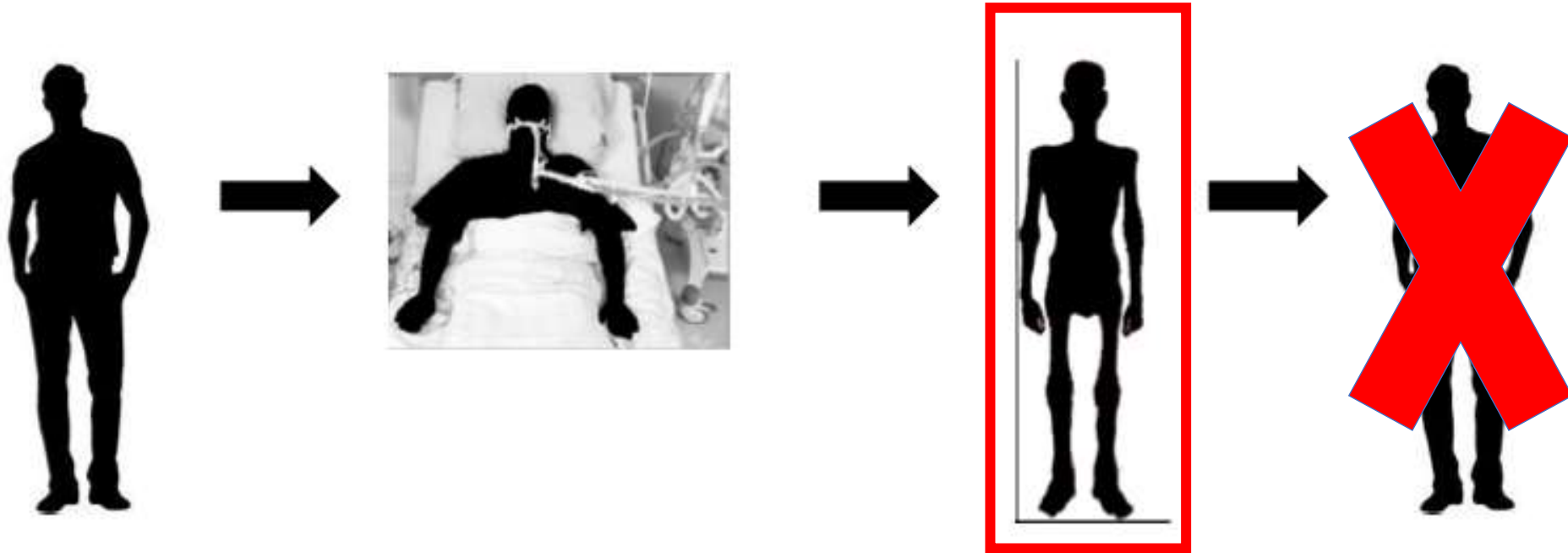
**2/ Informatie en communicatie**

Disconnect between what patients and family believe to be true ...



....and what we believe to be true

Shared decision-making is hard when there are two realities.



# Websites voor familie van patiënten



<https://icusteps.org>

<https://healthunlocked.com/icusteps>

<https://icuunwrapped.co.uk>

[http://www.criticalcarerecovery.com/x37/families\\_page](http://www.criticalcarerecovery.com/x37/families_page)

[www.healthtalkonline.org/Intensive\\_care](http://www.healthtalkonline.org/Intensive_care)

<https://www.worldsepsisday.org>

<https://www.startinghearts.org>

<http://www.lifeaftersca.org>

[www.icudelirium.org](http://www.icudelirium.org)

<https://www.cruse.org.uk>

English



German



[www.eric-projekt.de](http://www.eric-projekt.de)

Portuguese



<http://www.utivisitas.com.br>

Dutch



<https://www.fcic.nl/>

<https://icconnect.nl/>

## Knowledge of long-term outcome in critically ill patients is important

---

- it could help **to select or to triage** patients for ICU admission
- to give reliable **information** towards patient and family
- to improve **decision-making** for the individual patient
- for **advanced care planning**
- avoid **over-utilization and under-utilization** of ICU beds

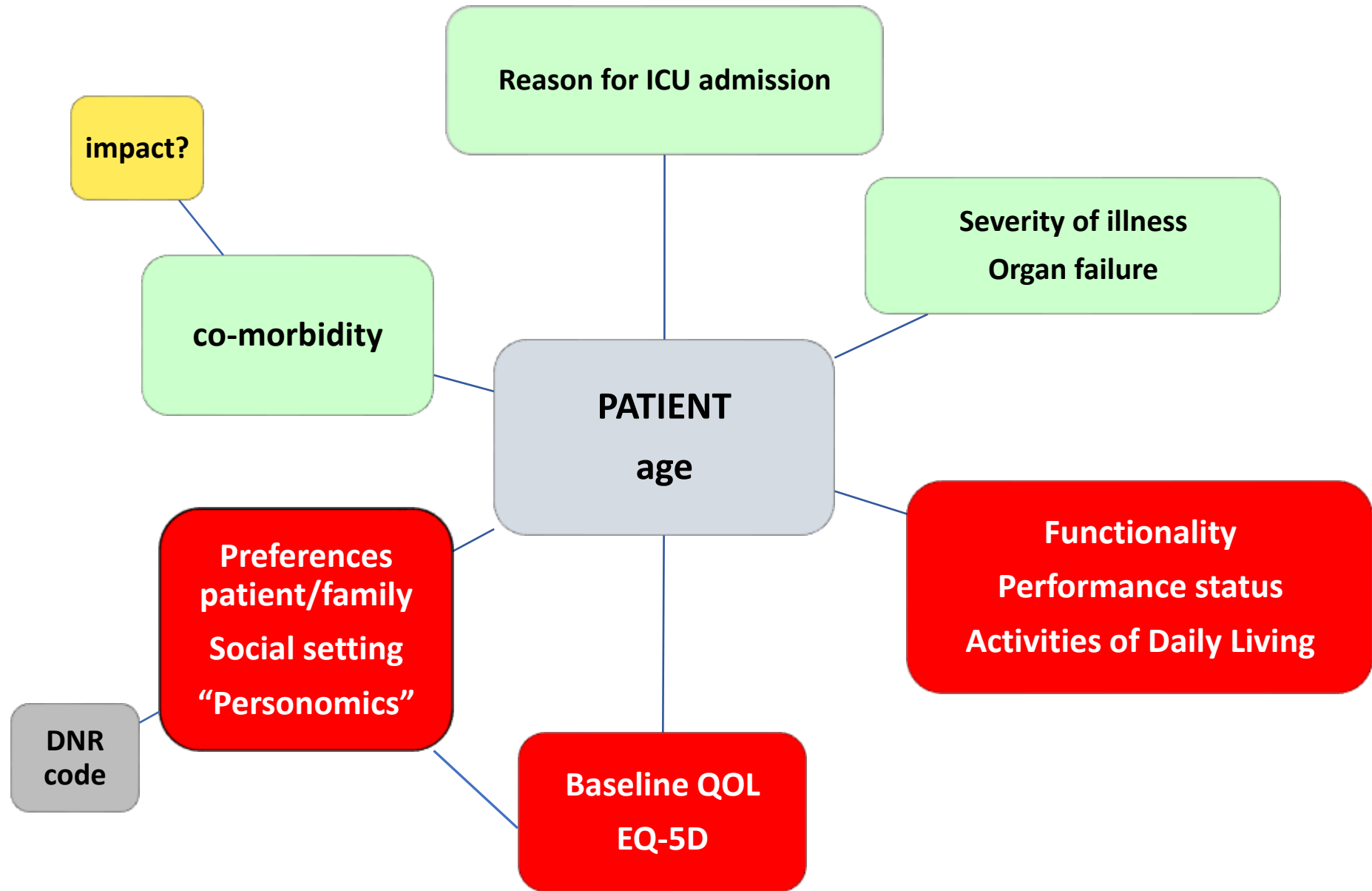
**Who will benefit from an ICU admission when the chances of a meaningful outcome are unclear?**

# Development of a prediction model for long-term quality of life in critically ill patients

---

1. Baseline QOL – functionality
2. Activities of daily living (ADL)  
bathing, dressing, toileting, transferring, continence, feeding
3. Age  
marker of organ reserve
4. Co-morbidity
5. Socio-economic status

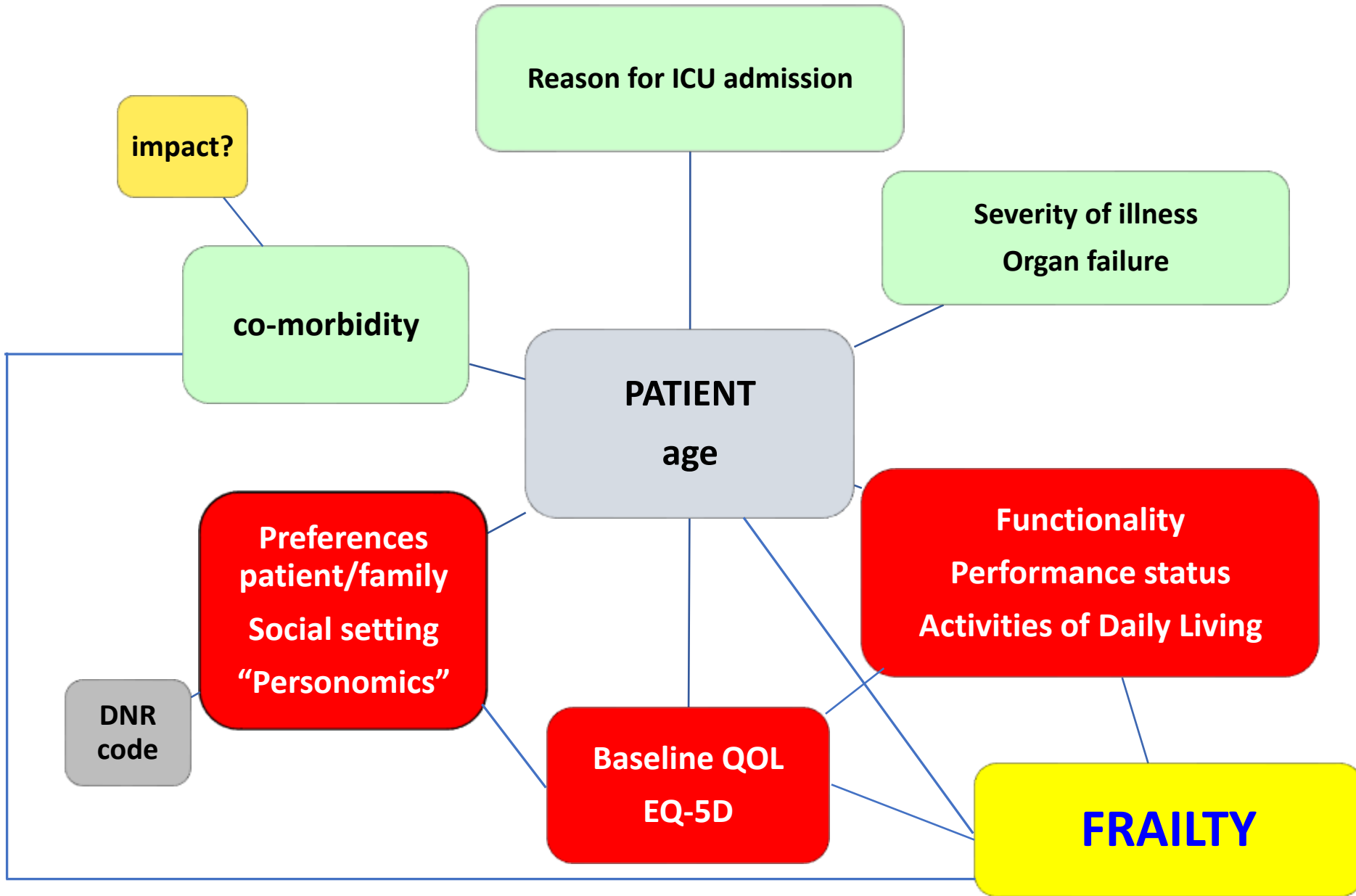
**Oeyen, J Crit Care 2018**





there is more to age than yea





## Clinical Frailty Scale\*



**1 Very Fit** – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.



**2 Well** – People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.



**3 Managing Well** – People whose **medical problems are well controlled**, but are **not regularly active** beyond routine walking.



**4 Vulnerable** – While **not dependent** on others for daily help, often **symptoms limit activities**. A common complaint is being “slowed up”, and/or being tired during the day.



**5 Mildly Frail** – These people often have **more evident slowing**, and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.



**6 Moderately Frail** – People need help with **all outside activities** and with **keeping house**. Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.



**7 Severely Frail** – **Completely dependent for personal care**, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).



**8 Very Severely Frail** – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.



**9 Terminally Ill** - Approaching the end of life. This category applies to people with a **life expectancy <6 months**, who are **not otherwise evidently frail**.

### Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

\* 1. Canadian Study on Health & Aging, Revised 2008.


2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.



Acute Frailty Network Medical

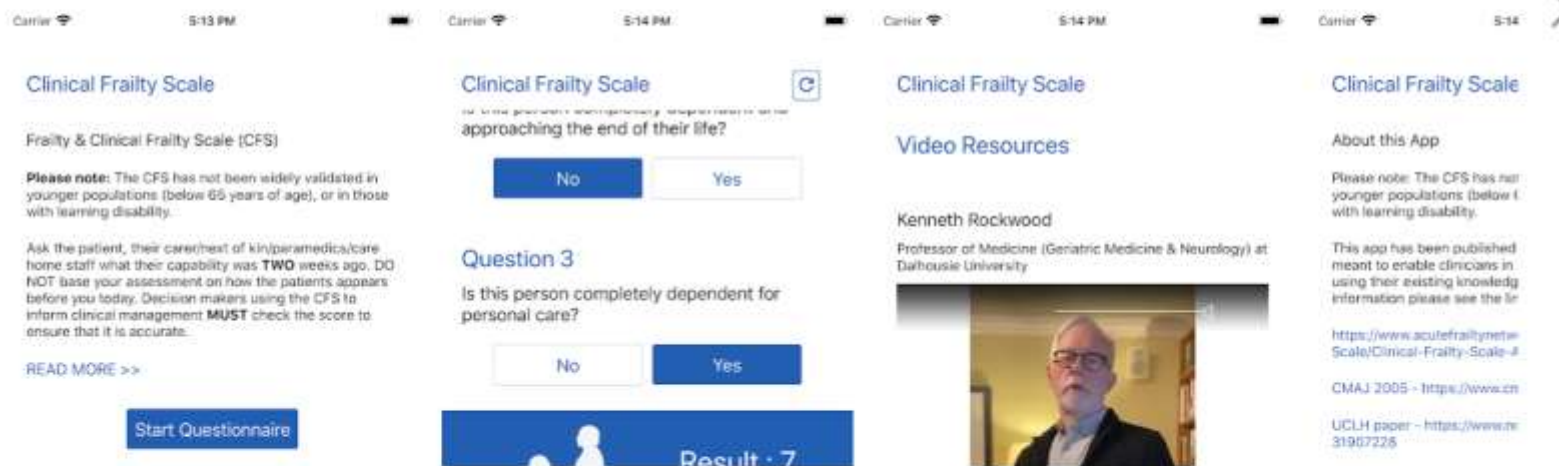
★★★★★ 5 

 Everyone

 You don't have any devices

 Add to Wishlist

Install



CFS (Clinical Frailty Scale) has been created to help health care professionals quickly identify frailty in people over the age of 65, it is a reliable predictor of outcomes in the urgent care context and is a useful decision support tool.

ORIGINAL



# The impact of frailty on ICU and 30-day mortality and the level of care in very elderly patients ( $\geq 80$ years)

Hans Flaatten<sup>1,2\*</sup>, Dylan W. De Lange<sup>3</sup>, Alessandro Morandi<sup>4,5</sup>, Finn H. Andersen<sup>6,7</sup>, Antonio Artigas<sup>8</sup>, Guido Bertolini<sup>10</sup>, Ariane Boumendil<sup>11</sup>, Maurizio Cecconi<sup>12</sup>, Steffen Christensen<sup>9</sup>, Loredana Faraldi<sup>13</sup>, Jesper Fjølner<sup>9</sup>, Christian Jung<sup>14</sup>, Brian Marsh<sup>15</sup>, Rui Moreno<sup>16</sup>, Sandra Oeyen<sup>17</sup>, Christina Agwald Öhman<sup>18</sup>, Bernardo Bollen Pinto<sup>19</sup>, Ivo W. Soliman<sup>20</sup>, Wojciech Szczeklik<sup>21</sup>, Andreas Valentin<sup>22</sup>, Ximena Watson<sup>12</sup>, Tilemachos Zaferidis<sup>23</sup>, Bertrand Guidet<sup>24,25,26</sup> on behalf of the VIP1 study group

VIP1 study  
Flaatten, 2017  
Intensive Care Med

**5021 patients**  
**311 ICUs**  
**21 countries**

ORIGINAL



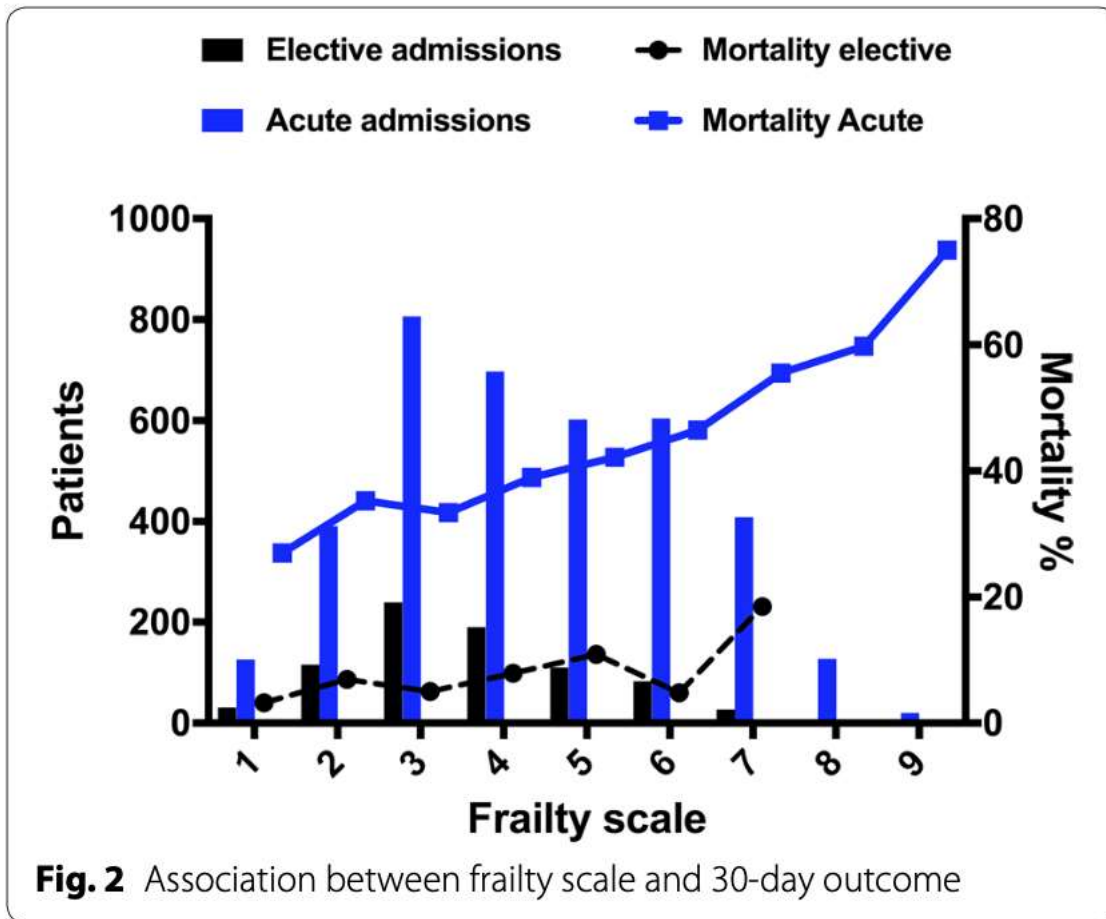
# The contribution of frailty, cognition, activity of daily life and comorbidities on outcome in acutely admitted patients over 80 years in European ICUs: the VIP2 study

Bertrand Guidet<sup>1\*</sup>, Dylan W. de Lange<sup>2</sup>, Ariane Boumendil<sup>3</sup>, Susannah Leaver<sup>4</sup>, Ximena Watson<sup>5</sup>, Carol Boulanger<sup>6</sup>, Wojciech Szczeklik<sup>7</sup>, Antonio Artigas<sup>8</sup>, Alessandro Morandi<sup>9</sup>, Finn Andersen<sup>10</sup>, Tilemachos Zafeiridis<sup>11</sup>, Christian Jung<sup>12</sup>, Rui Moreno<sup>13</sup>, Sten Walther<sup>14</sup>, Sandra Oeyen<sup>15</sup>, Joerg C. Schefold<sup>16</sup>, Maurizio Cecconi<sup>17,18</sup>, Brian Marsh<sup>19</sup>, Michael Joannidis<sup>20</sup>, Yuriy Nalapko<sup>21</sup>, Muhammed Elhadi<sup>22</sup>, Jesper Fjølner<sup>23</sup>, Hans Flaatten<sup>24,25</sup> for the VIP2 study group

VIP2 study  
Guidet, 2020  
Intensive Care Med

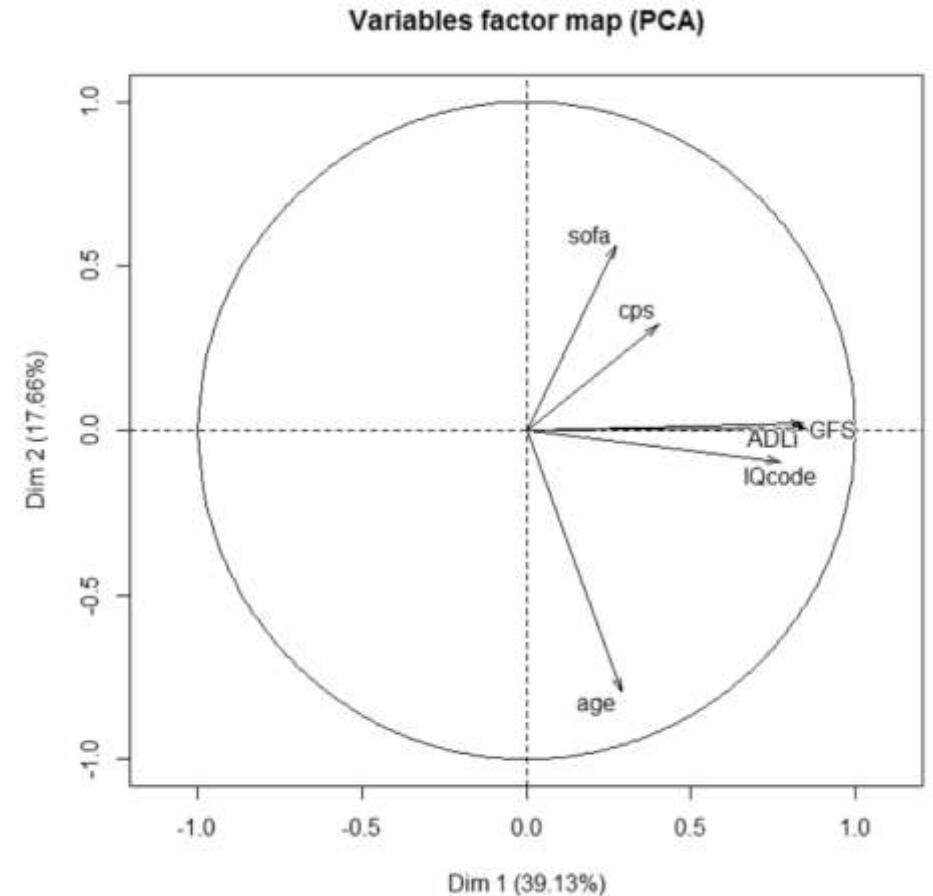
**3920 patients**  
**242 ICUs**  
**22 countries**

# VIP1 study



strong association between CFS and mortality

# VIP2 study



CFS is able to predict short-term mortality in elderly patients admitted to the ICU. Other geriatric syndromes do not add improvement to the prediction model.

<b>EXCLUSIECRITERIA (minstens één)</b>	<b>SLECHTE INDICATIE (minstens één)</b>	<b>GERINGE PRIORITEIT (cumulatief in geval van tie***)</b>	<b>GOEDE PRORITEIT (cumulatief in geval van tie)</b>	<b>BESTE PRIORITEIT (cumulatief in geval van tie)</b>
<b>CFS* score 8 of 9</b>	<b>CFS score 7</b>	<b>CFS score 5 of 6</b>	<b>CFS score 4</b>	<b>CFS &lt; 4</b>
<b>Wilsbeschikking of therapiebegrenzing : geen opname op IZ of ventilatie</b>	<b>≥ 1 zeer ernstige comorbiditeit: NYHA klasse IV, COPD GOLD IV levercirrose Child Pugh C...**</b>	<b>&gt; 1 matig ernstig comorbiditeit NYHA klasse III, COPD GOLD III, levercirrose Child Pugh B...</b>	<b>1 matig ernstig comorbiditeit NYHA klasse III, COPD GOLD III, levercirrose Child Pugh B...</b>	<b>CFS &lt; 3</b>
<b>Ernstige neurologische beschadiging schade zonder hoop op recuperatie</b>		<b>Acuut falen van 3 organen (ventilatie / vasopressor / dialyse nood)</b>	<b>Acuut falen van 2 organen (ventilatie / vasopressor / dialyse nood)</b>	<b>CFS &lt; 2</b>
<b>Eindstadium neurodegeneratieve aandoening van gelijk welke oorzaak</b>	<b>Geschatte verwachte levensduur &lt; 1 jaar</b>	<b>Geschatte verwachte overleving in hospitaal &lt; 50%</b>		<b>Geschatte verwachte overleving in hospitaal &gt; 80%</b>
<b>Uitermate ongunstige evolutie zonder respons op maximale therapie (trauma, shock..)</b>		<b>&gt; 80 jaar en verwachte ventilatie duur &gt; 14 dagen</b>		
<b>Non witnessed non shockable circulatoire stilstand</b>		<b>SOFA score &gt; 10 en oplopend</b>		

Leeftijd op zich is geen criterium (BVG richtlijn).

\* Bij patiënten met een handicap kan de CFS niet gebruikt worden. \*\*Zonder indicatie voor hart, long of levertransplantatie. \*\*\* tie = patiënten met dezelfde levenskansen.

Voor goede en beste prioriteit speelt geschatte overlevingsverwachting bvb op basis van SOFA geen rol gezien deze predicties in deze range niet accuraat genoeg zijn om individuele beslissingen op te baseren.

In geval van "tie" kunnen factoren cumulatief worden beschouwd (negatief bij geringe en goede prioriteit, positief bij beste prioriteit).

# COVIP study – a VIP network study

378 ICUs – 44 countries – 3600 patients

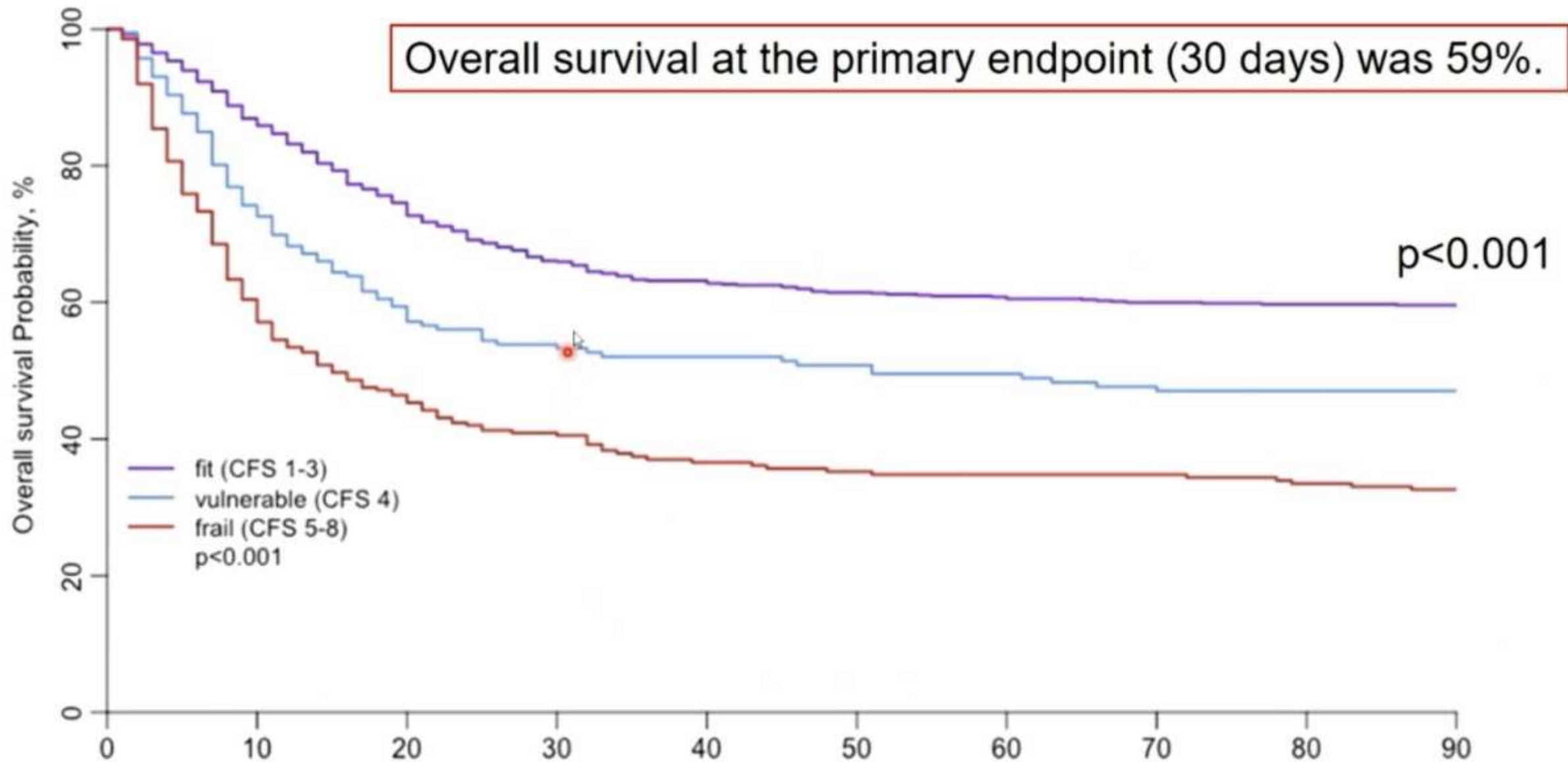
Inclusion criteria:

- **1/ age  $\geq$  70 years**
- **2/ ICU admission due to proven COVID – 19 infection**

COVIP study

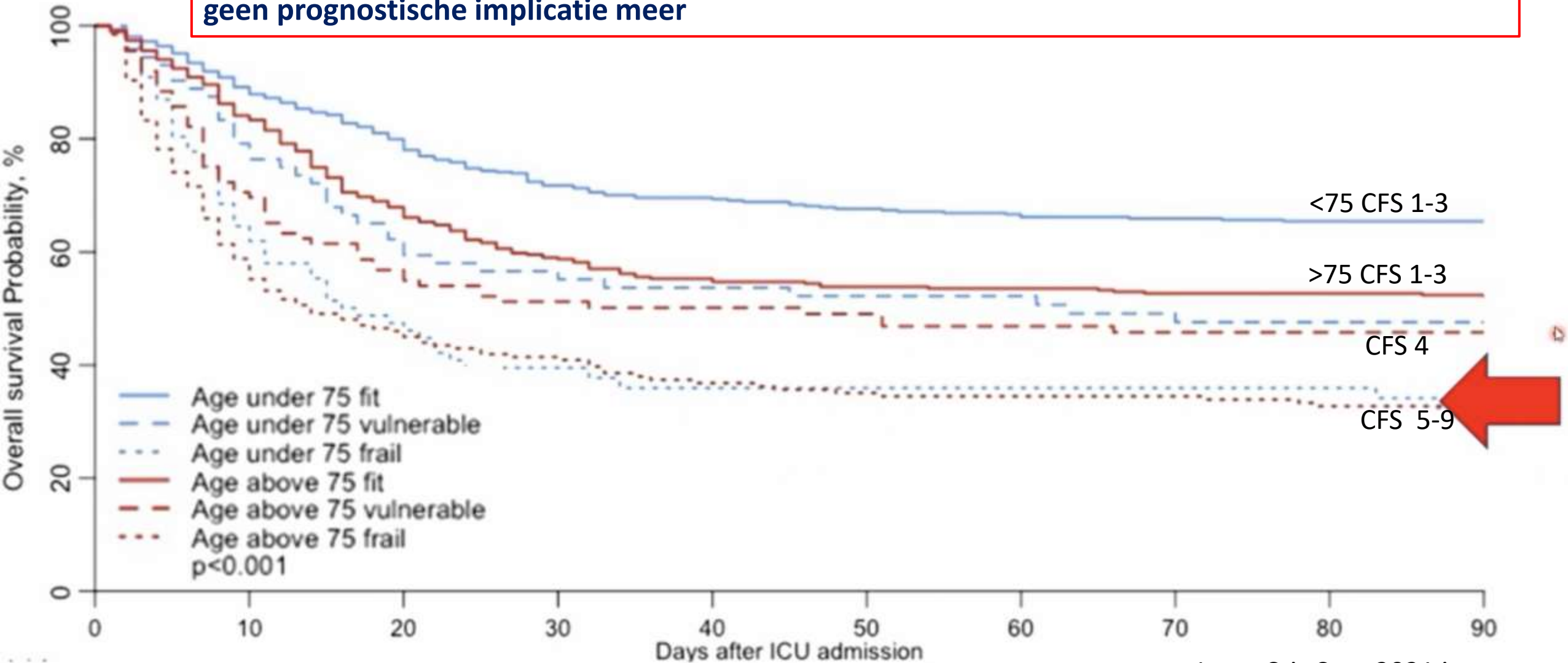
Corona Virus Disease (COVID-19) in Very Elderly Intensive Care Patients





Leeftijd blijft een prognostische implicatie hebben zolang de patiënt fit is

Van zodra de patiënt echter vulnerable is (CFS 4) of frail (CFS 5-9) dan heeft leeftijd op zich bijna geen prognostische implicatie meer



Characteristics

Age (yrs) **74 (73-78)**

Male gender 76 %

BMI (kg/m<sup>2</sup>) 26.2 (23.6-29.4)

Clinical Frailty Scale **2 (2-3)**

Days with symptoms prior to hospital 8 (4-14)

Days in hospital prior to ICU 2 (1-4)

ICU stay

Need for invasive mechanical ventilation **62.0 %**

Duration of MV (hours)\* 397 (213-579)

Duration of MV (days)\* **16.5 (8.9-24.1)**

Prone ventilation\* **28.6 %**

Need for tracheostomy\* 14.3 %

Need for vasopressor therapy **60.0 %**

Need for dialysis\* 10.2 %

Outcome

Withhold of therapy\* **40.0 %**

Withdraw of therapy\* **34.7 %**

ICU-LOS (hours)\* 284 (108-562)

ICU-LOS (days)\* 11.8 (4.5 – 23.4)

ICU-mortality\* **38.8 %**

30 days-mortality (47 patients) **42.6 % (<-> 41 % overall COVIP)**

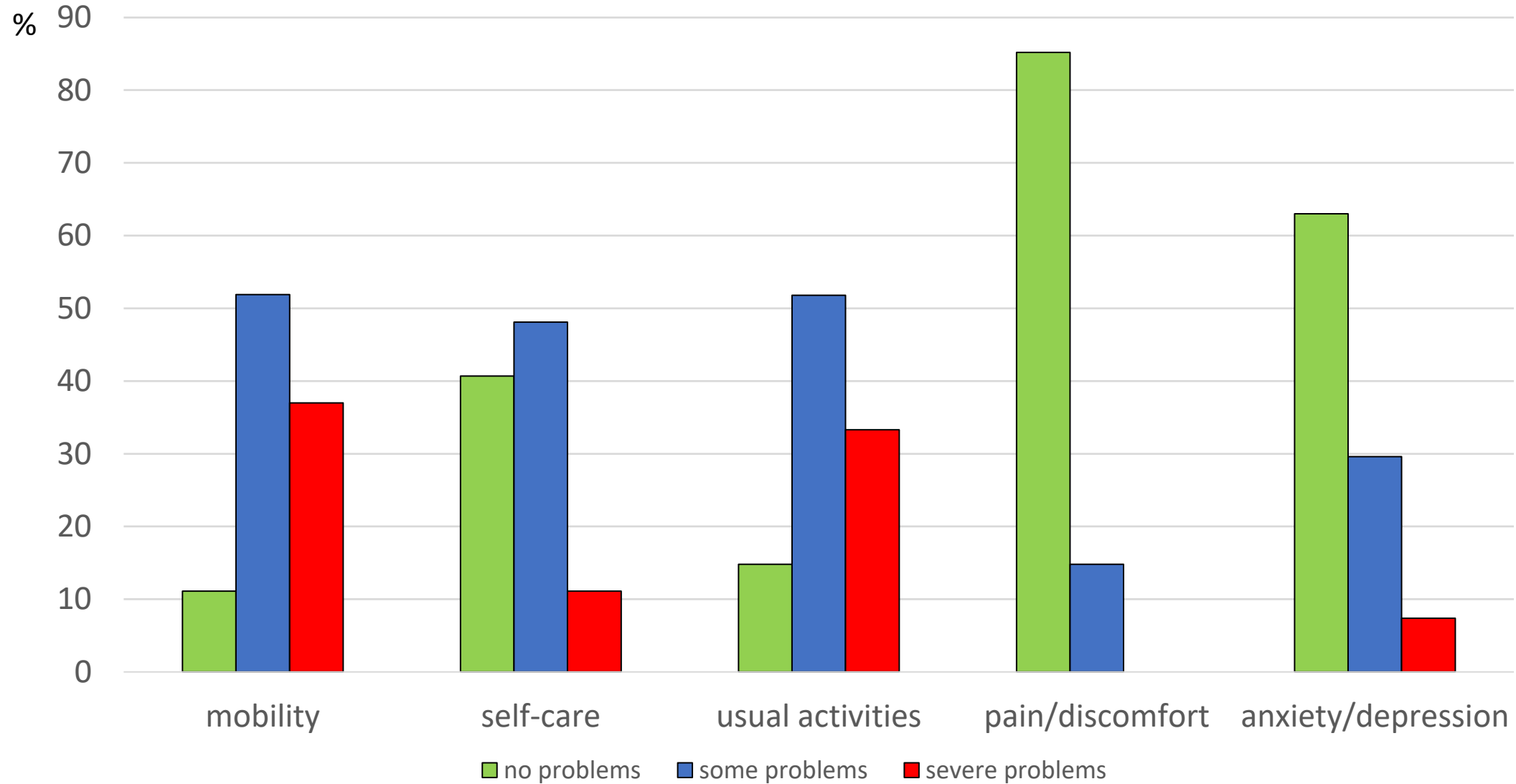
3-months mortality (46 patients) **45.7%**

## ICU Ghent University Hospital

ICU-mortality 80 years or older	<b>16.8 %</b> (20-30 %)	<b>38.8%</b>	COVID ICU-mortality 70 years or older
3-months mortality 80 yrs or older	<b>38.9 %</b> (40 %)	<b>45.7%</b>	COVID 3-months mortality 70 years or older

# Problems 3 months after hospital discharge in COVID patients (EQ-5D)

(N=27 during follow-up call)



# WAT KUNNEN WE DOEN?

## 3/ “ICU liberation bundle” ter preventie van PICS



# ABCDEF-bundel ter preventie van PICS

## ABCDEF bundle

**Assess, prevent and manage pain**

**Both spontaneous awakening trials and spontaneous breathing trials**

**Choice of analgesia and sedation**

**Delirium assessment, prevention and management**

**Early mobility and exercise**

**Family engagement and empowerment**

# ABCDEF-bundel ter preventie van PICS

**COVID-19**

**ABCDEF bundle**

Assess, prevent and manage pain

Both spontaneous awakening trials and spontaneous breathing trials

Choice of analgesia and sedation

Delirium assessment, prevention and management

Early mobility and exercise

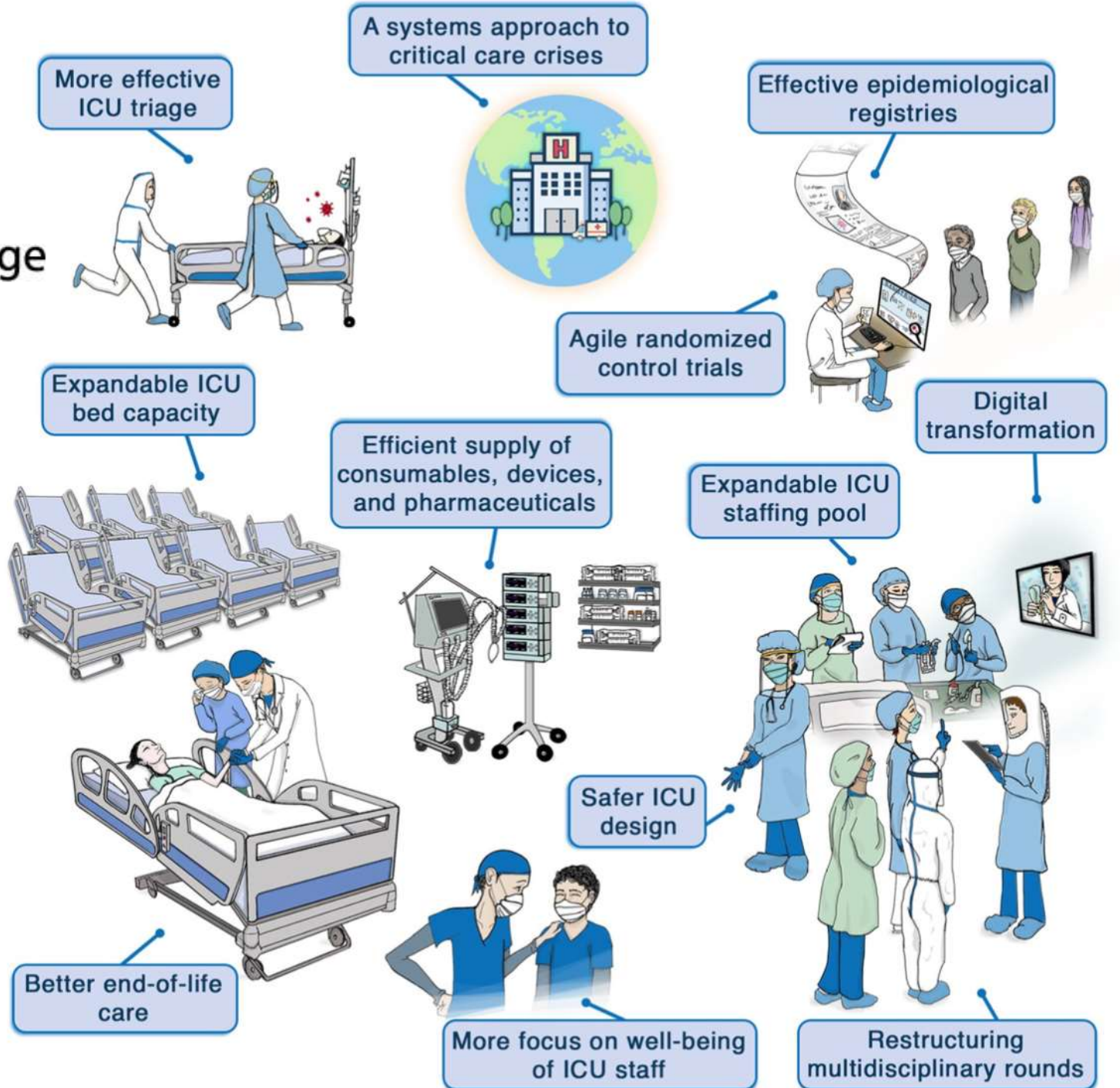
Family engagement and empowerment



WAT KUNNEN WE DOEN?

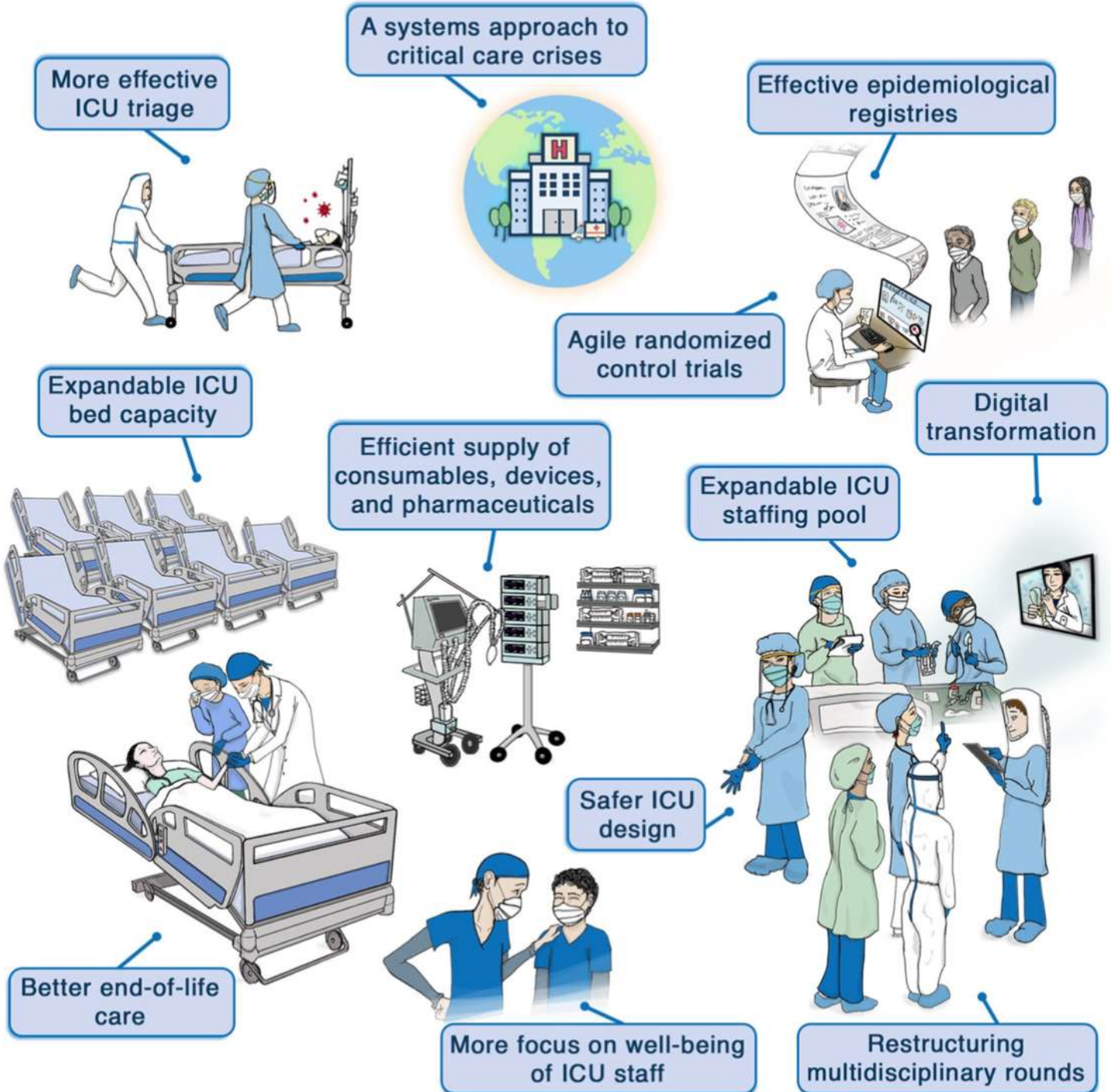
4/ What is next?

# How the COVID-19 pandemic will change the future of critical care



# How the COVID-19 pandemic will change the future of critical care

**Dealing with long-term impairments in ICU survivors?**



# Society of Critical Care Medicine's International Consensus Conference on Prediction and Identification of Long-Term Impairments After Critical Illness

Mikkelsen, Crit Care Med november 2020

## Patients at high-risk for long-term cognitive, mental and physical impairments after critical illness

Functional domain	Before critical illness	During critical illness	After critical illness	Screening tool
Cognition	Pre-existing cognitive dysfunction	Incidence and duration of delirium Sedation (benzodiazepines) Severe sepsis/shock Hypoxia ARDS	Difficulties in concentration, memory, multi-tasking, return to work	MoCA (Montreal Cognition Assessment)
Mental health	Pre-existing mental health problems (anxiety, depression, PTSD)	Memories of frightening experiences in ICU	Early symptoms of anxiety, depression, or PTSD	HADS (Hospital Anxiety and Depression Scale)
Physical	Pre-existing functional disability Frailty Pre-existing cognitive impairment	immobility weakness pain	weakness	6-minuts walk and/or EQ-5D

# Society of Critical Care Medicine's International Consensus Conference on Prediction and Identification of Long-Term Impairments After Critical Illness

Mikkelsen, Crit Care Med november 2020

Timing	Action
ICU admission	Assess pre-ICU functional ability Document in patient's file
ICU to floor handoff	Report pre-ICU functionality and current functional abilities achieved
Hospital discharge	Assess pre-discharge functionality Make overall functionality report – linked to pre-ICU abilities – to guide post-acute care referral
Post-discharge	Screen for at-risk patients (using recommended tools) within 2-4 weeks of hospital discharge

# ZES TOOLS OM PICS TE DETECTEREN IN HUISARTSGENEESKUNDE

	VERHOOGD RISICO BIJ	UIT TE VOEREN TESTEN
<b>FYSIEKE SYMPTOMEN</b>	<ul style="list-style-type: none"><li>• Ernst van de aandoening die een lang verblijf op de intensive care vereiste</li><li>• Gevorderde leeftijd</li></ul>	<ol style="list-style-type: none"><li>1. MOBILITEIT: <b>TIMED UP-AND-GO (TUG)</b></li><li>2. SPIERZWAKTE: <b>HAND DYNAMOMETER</b></li></ol>
<b>PSYCHISCHE SYMPTOMEN</b>	<ul style="list-style-type: none"><li>• Reeds bestaande psychische problemen</li><li>• Indringende traumatische herinneringen</li><li>• Volledige amnesie van het verblijf in IC</li><li>• Vroege tekenen van angst en depressie bij ontslag</li></ul>	<ol style="list-style-type: none"><li>1. DEPRESSIE: <b>WHOOLEY VRAGEN</b></li><li>2. ANGST: <b>GAD-2 TEST</b></li></ol>
<b>PICS-F</b>	<ul style="list-style-type: none"><li>• Vrouwelijk familielid</li><li>• Beperkte autonomie van de patiënt</li></ul>	
<b>COGNITIEVE SYMPTOMEN</b>	<ul style="list-style-type: none"><li>• Perioden van waanbeelden tijdens het verblijf op IC (vooral bij vele en/of lange perioden)</li></ul>	<ol style="list-style-type: none"><li>1. ALGEMENE COGNITIEVE FUNCTIE: <b>MINI-COG</b></li><li>2. VERBALE WOORDVLOTHEID: <b>ANIMAL NAMING</b></li></ol>

## WHAT'S NEW IN INTENSIVE CARE

# A plan for improving the humanisation of intensive care units

Gabriel Heras La Calle<sup>1,2\*</sup>, Ángela Alonso Oviés<sup>1,3</sup> and Vicente Gómez Tello<sup>1,4</sup>

oog voor patiënt 'well-being'

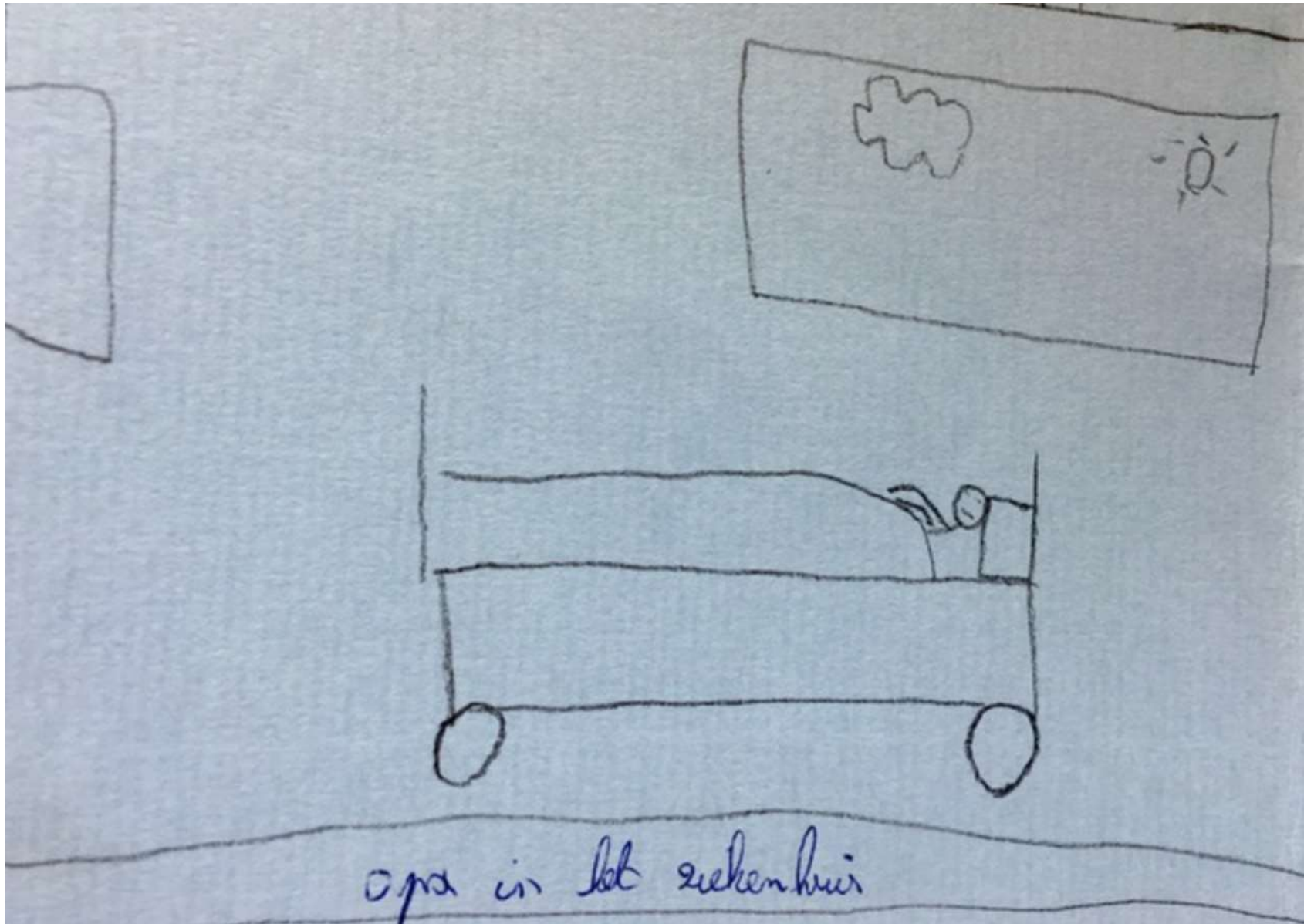
patient-centered care

betrekken van familie

communicatie tools

verbeteren van de IZ omgeving

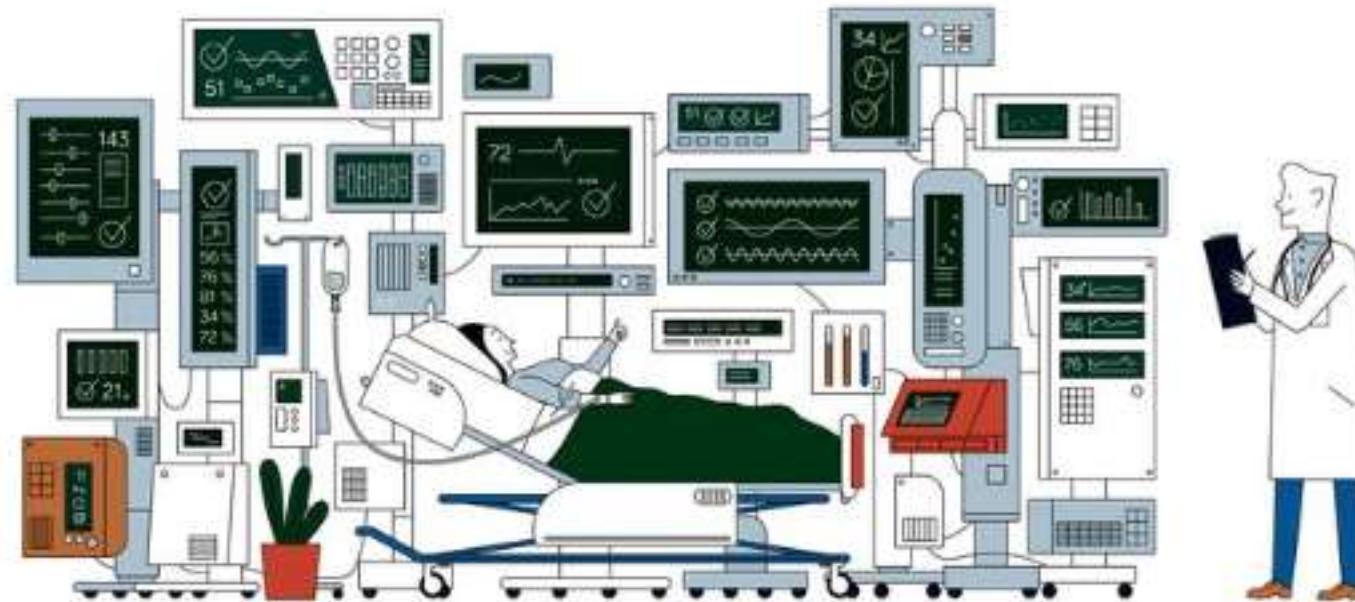




opa in het ziekenhuis



changing the ICU  
from a TOXIC to a HEALING  
environment





# Ghent University Hospital – summer of 2019 going out with some ICU patients





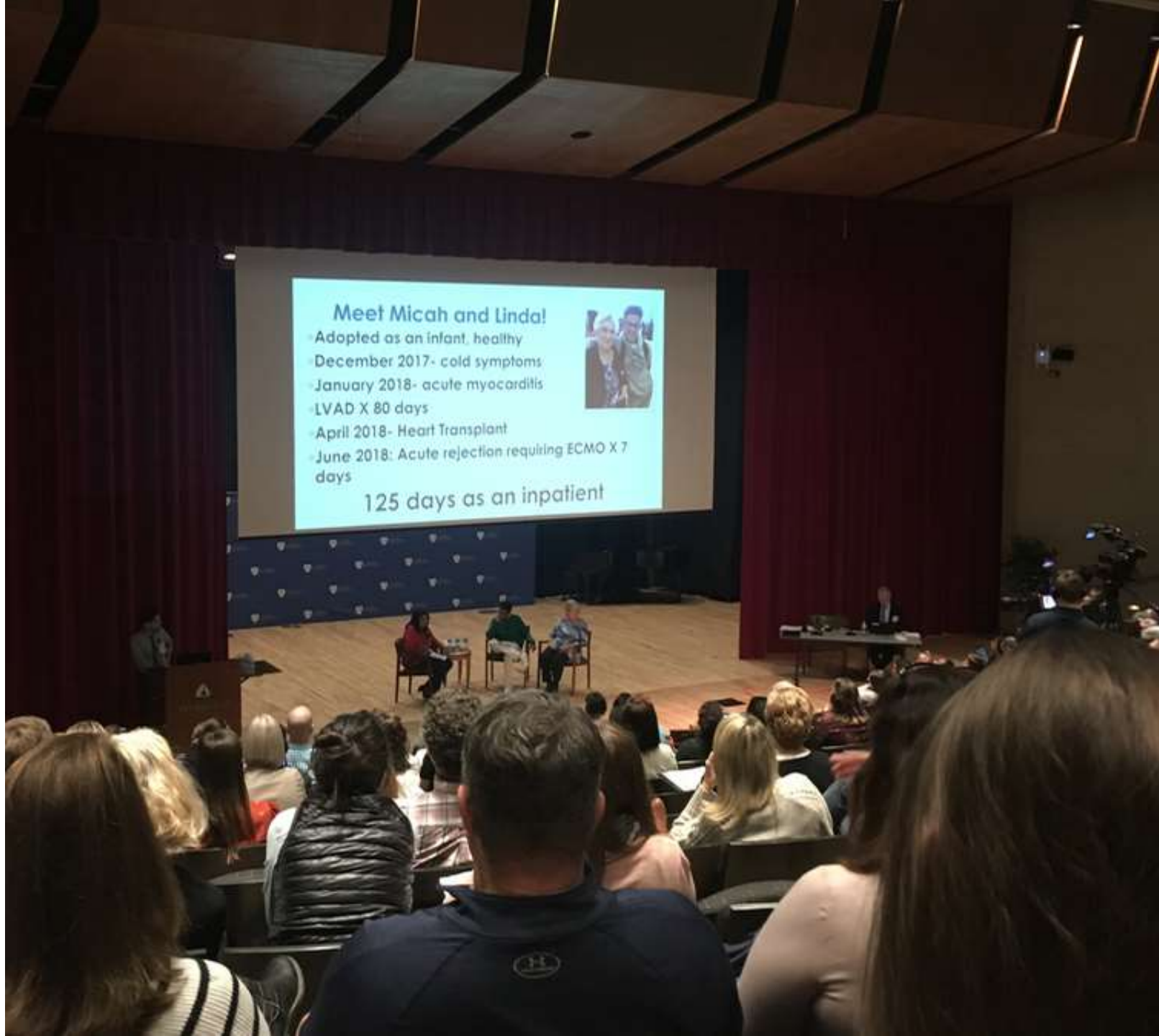
# Rapid establishment of a COVID-19 critical care unit in a convention centre: the Nightingale Hospital London experience

Alastair G. Proudfoot<sup>1,2\*</sup>, Ben O'Brien<sup>1,2</sup>, Richard Schilling<sup>1,2</sup>, Doug W. Gould<sup>3</sup>, Alan McGlennan<sup>4</sup> and Collaborating authors



**WAT KUNNEN WE DOEN?**

**5/ Leren van patiënten**



### Meet Micah and Linda!

- Adopted as an infant, healthy
- December 2017- cold symptoms
- January 2018- acute myocarditis
- LVAD X 80 days
- April 2018- Heart Transplant
- June 2018: Acute rejection requiring ECMO X 7 days



125 days as an inpatient

J. F. Jensen  
T. Thomsen  
D. Overgaard  
M. H. Bestle  
D. Christensen  
I. Egerod

## Impact of follow-up consultations for ICU survivors on post-ICU syndrome: a systematic review and meta-analysis

was no effect on other outcomes.

*Conclusions:* The evidence indicates that follow-up consultations might reduce symptoms of PTSD at 3–6 months after ICU discharge in ICU survivors, but without affecting QOL and other outcomes

investigated. This review highlights that planning of future RCTs should aim to standardize interventions and outcome measures to allow for comparisons across studies.



[www.uzintens.be](http://www.uzintens.be)

**Support bieden waar nodig**

- opgericht in 2018
- **Peer support**
- organiseert “**Drop-ins**” waarbij ex-patiënten van IZ en hun naasten op een informele manier een gesprek hebben met lotgenoten en met zorgverleners van IZ.
- andere activiteiten – sportevents, wandelingen, toneel, ...
- maar ook actief tijdens opname op IZ zelf:
  - rouwkoffers
  - boekjes voor kinderbezoek
  - kaartjes voor familie
  - opvolgbrieven na ontslag
  - inrichten wachtzaal 1K12IC
- voor en door vrijwilligers
- financieel afhankelijk van giften



# Welkom bij de post-COVID gemeenscha p

De post-COVID gemeenschap werd opgericht door en voor COVID-19 patiënten die na maanden nog steeds kampen met de gevolgen van hun besmetting

[word lid](#)

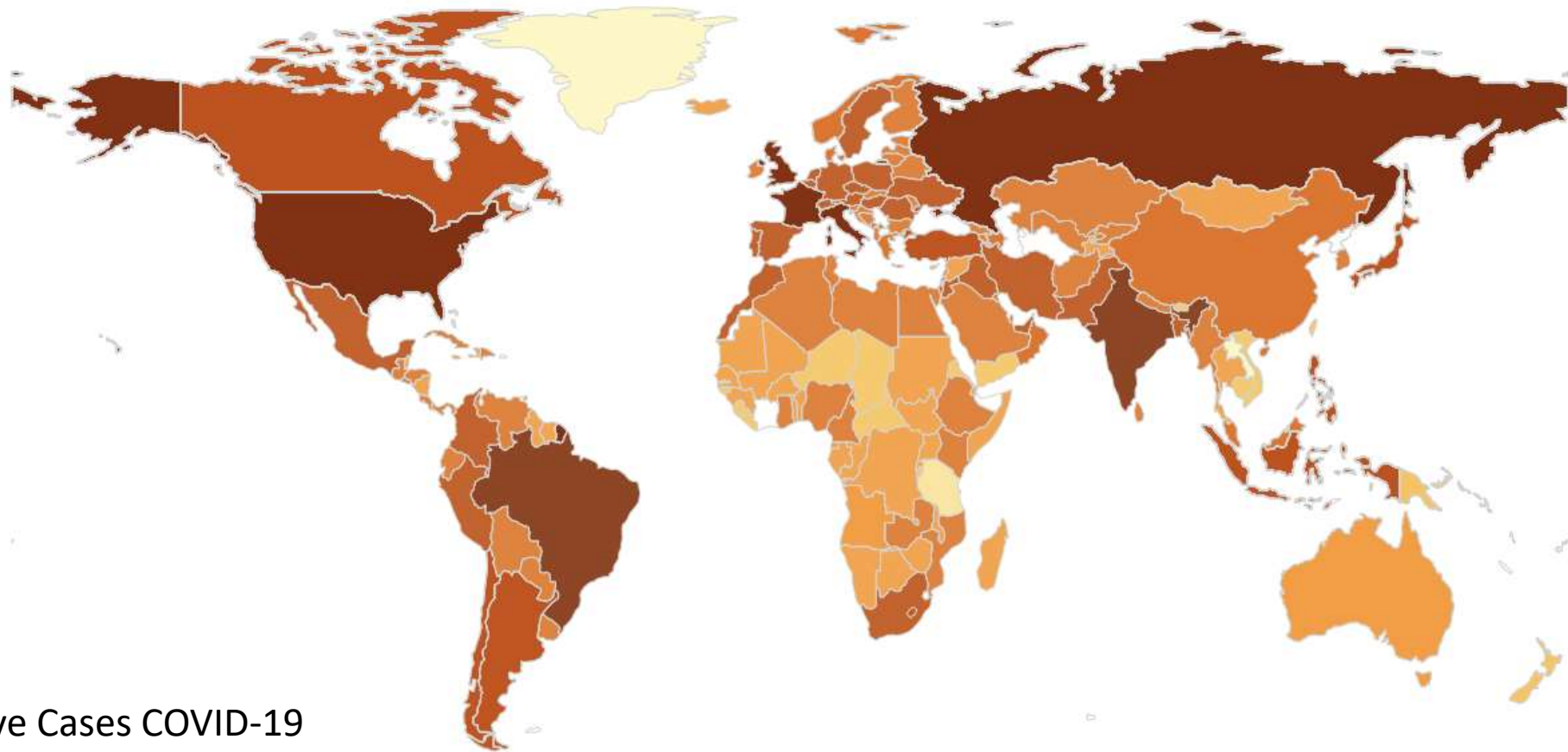
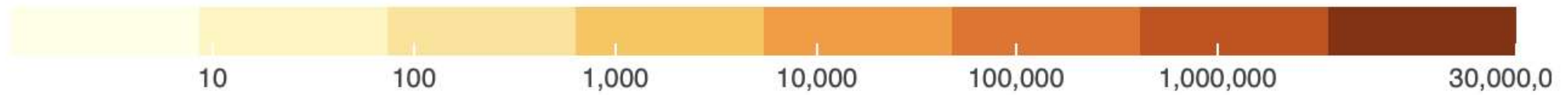
[www.post-covid.be](http://www.post-covid.be)



*Je krijgt een virus. Je bent ziek. Je vecht. Je overleeft. Met maanden later een lichaam dat de kracht nog steeds niet teruggekregen heeft.*

Zijn de sequellen na een langdurig IZ-verblijf voor een niet-COVID-19 reden  
**anders**  
dan de sequellen na een langdurig IZ-verblijf door COVID-19?

# SEQUELLEN NA INTENSIEVE ZORG LONG-TERM OUTCOME



Cumulative Cases COVID-19  
27 Maart 2021

Identifying patients' support needs following critical illness: a scoping review of the qualitative literature

**702 patients – 32 studies**

- **information**
- **empathy and trust**
- **tangible aid and services to directly assist need**
- **constructive feedback**

**Key Components of ICU Recovery Programs: What Did Patients Report Provided Benefit?**

- **continuity of care**
- **improving symptom status**
- **normalization and expectation management**
- **internal and external validation of progress**
- **reducing feelings of guilt and helplessness**

# THANKS !

- Team
- Psychologist (massage beds – hand cream – lottery)
- Flexibility
- Empathy towards us
- Gratitude from the family
- Enough PPE
- Meetings, in fact many, many meetings
- Early vaccination

TODAY I DO NOT WANT TO BE A DOCTOR

*Today, I do not want to be a doctor*

*Nobody is getting any better.*

*Those who were well are sick again*

*and those who were sick are sicker.*

*The dying think they will live.*

*The healthy think they are dying.*

*Someone has taken too many pills.*

*Someone has not taken enough.*

*A woman is losing her husband.*

*A husband is losing his wife.*

*The lame want to walk.*

*The blind want to drive.*

*The deaf are making too much noise.*

*The depressed are not making enough.*

*The asthmatics are smoking.*

*The alcoholics are drinking.*

*The diabetics are eating chocolate.*

*The mad are beginning to make sense.*

*Everyone's cholesterol is high.*

*Disease will not listen to me*

*Even when I shake my fist.*